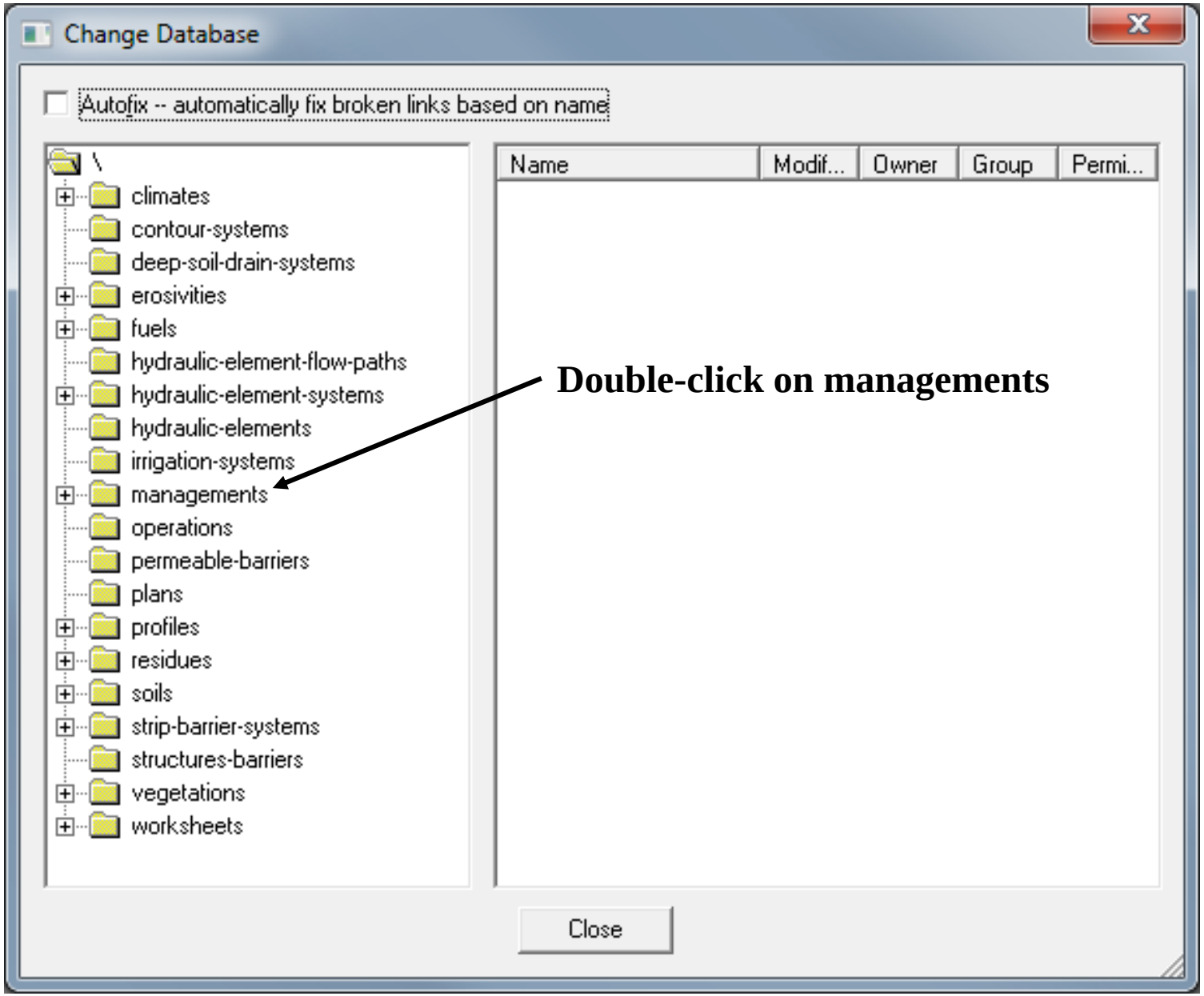
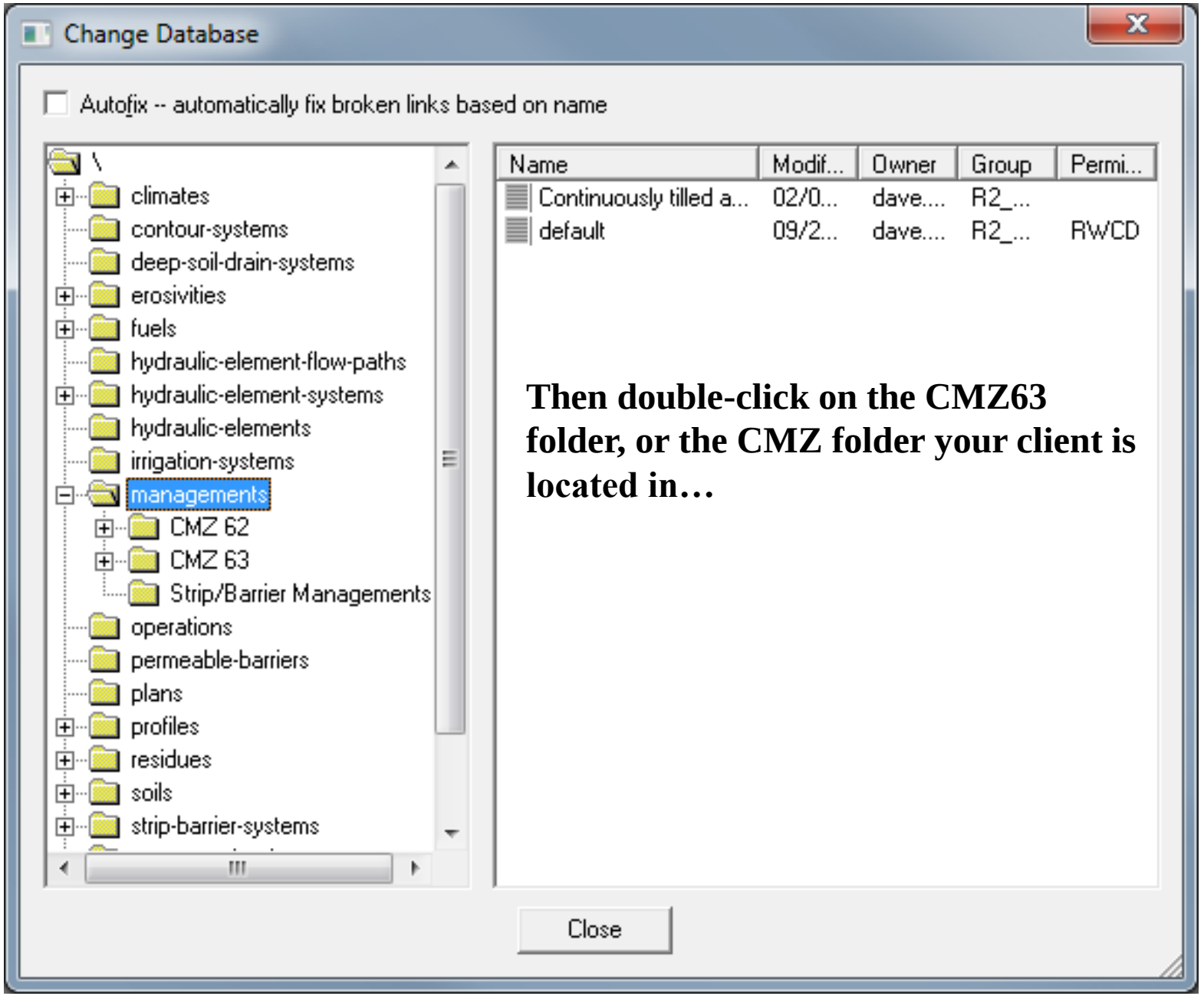
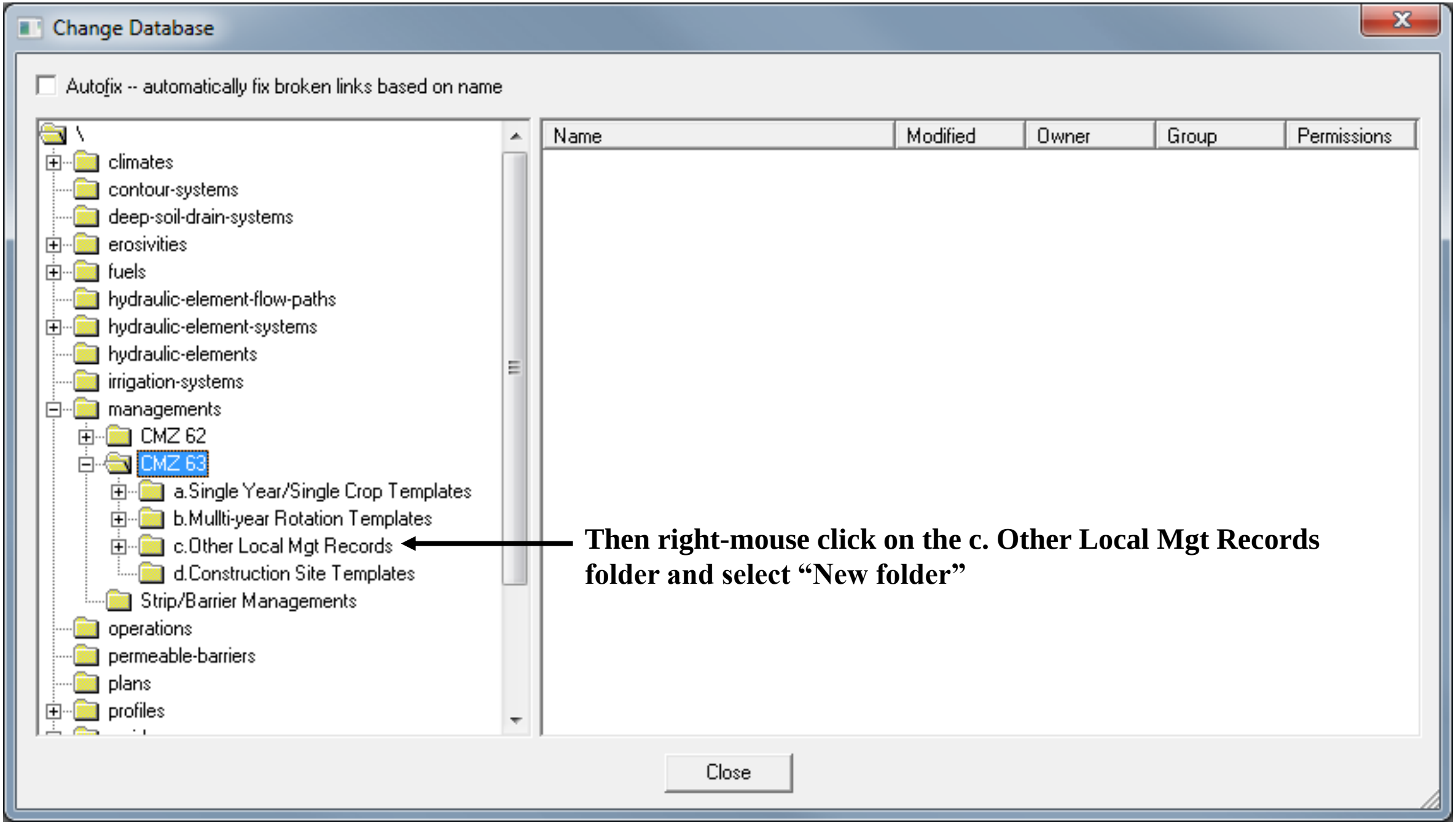
RUSLE2 Rotation Builder Manual for the August 18, 2014 version (Version 2.5.2.11)

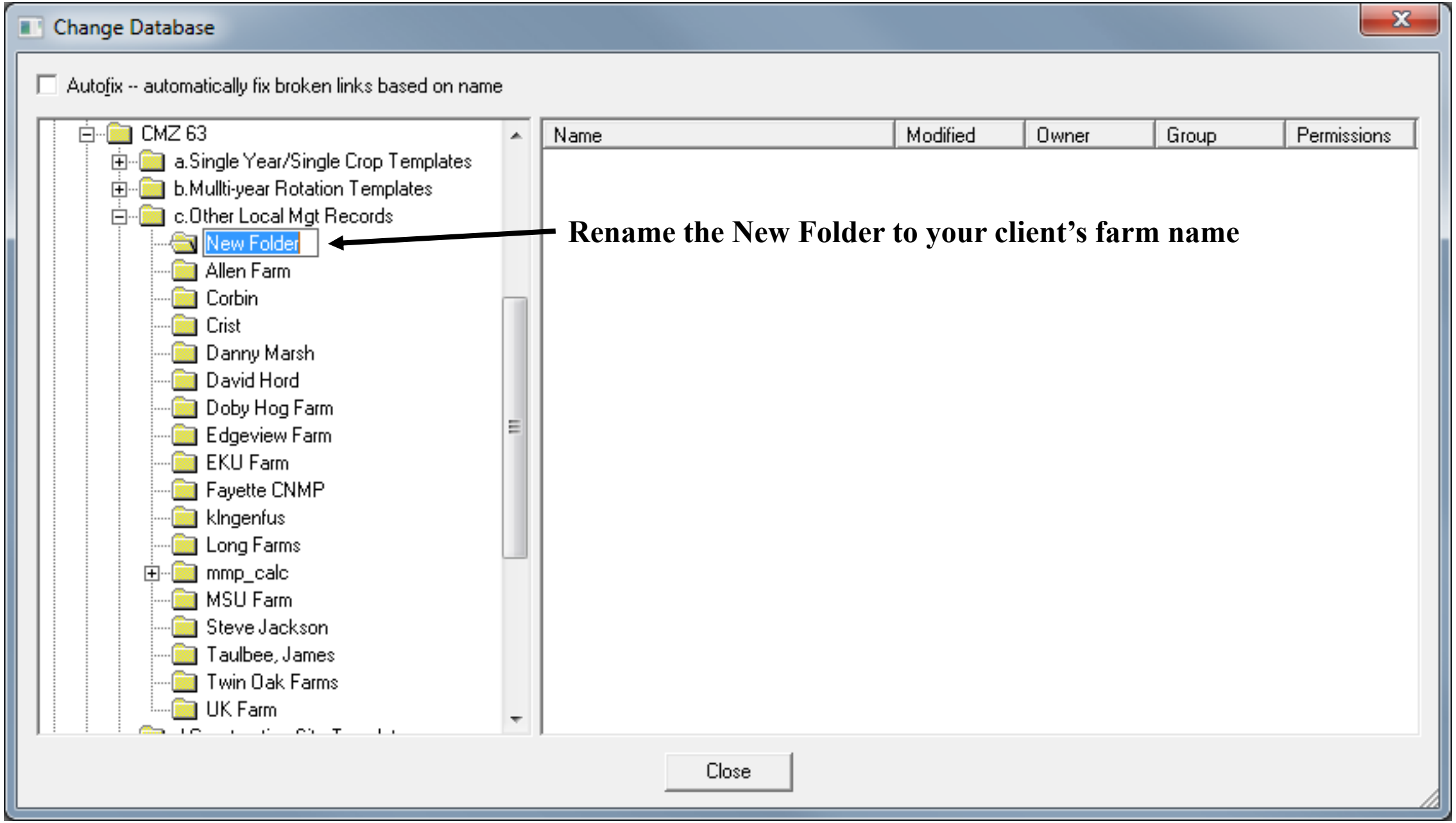
First we need to create the customer folder where the farm specific crop rotation/tillage files will be saved.

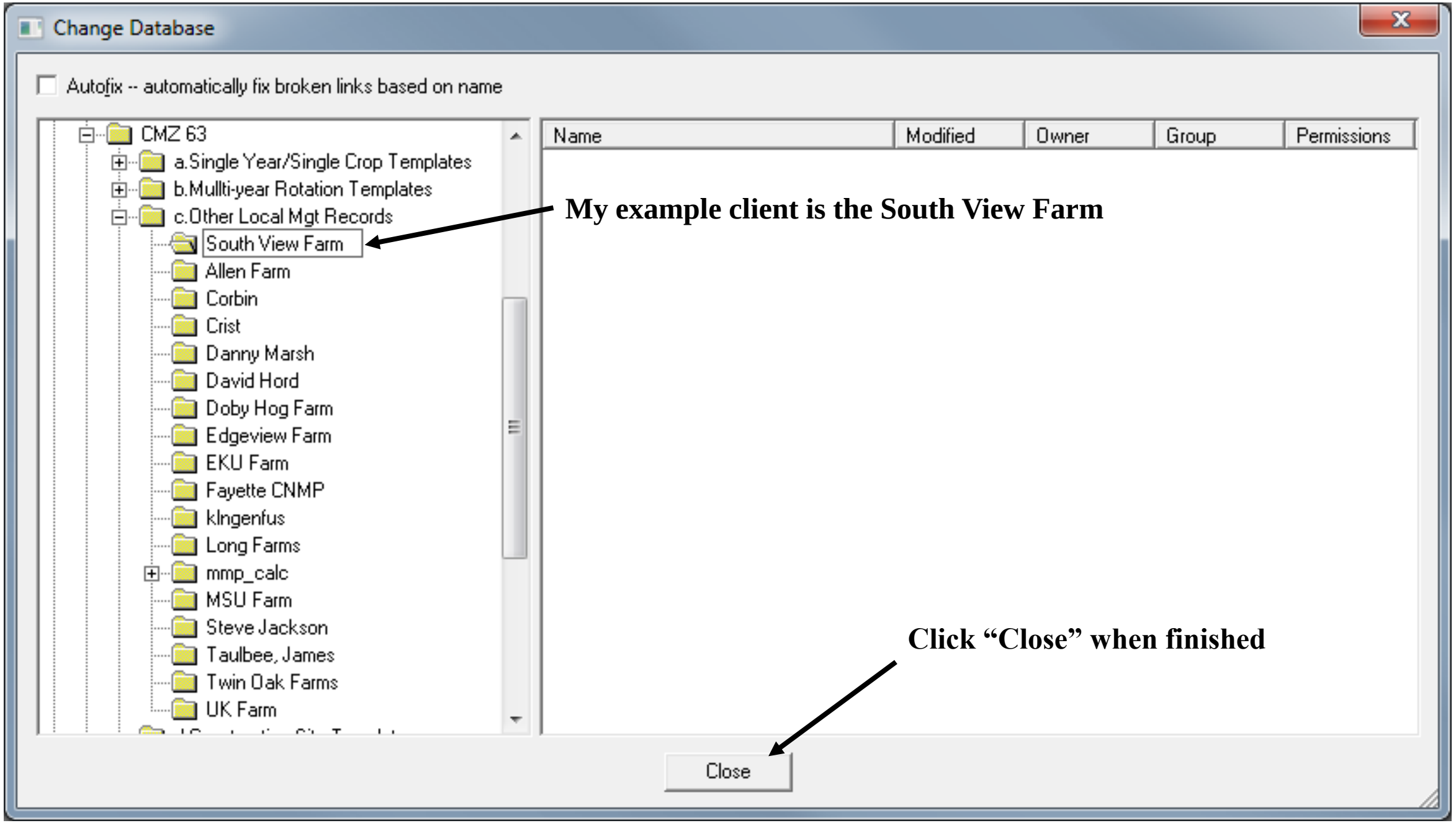
Click on Database and select Rearrange…

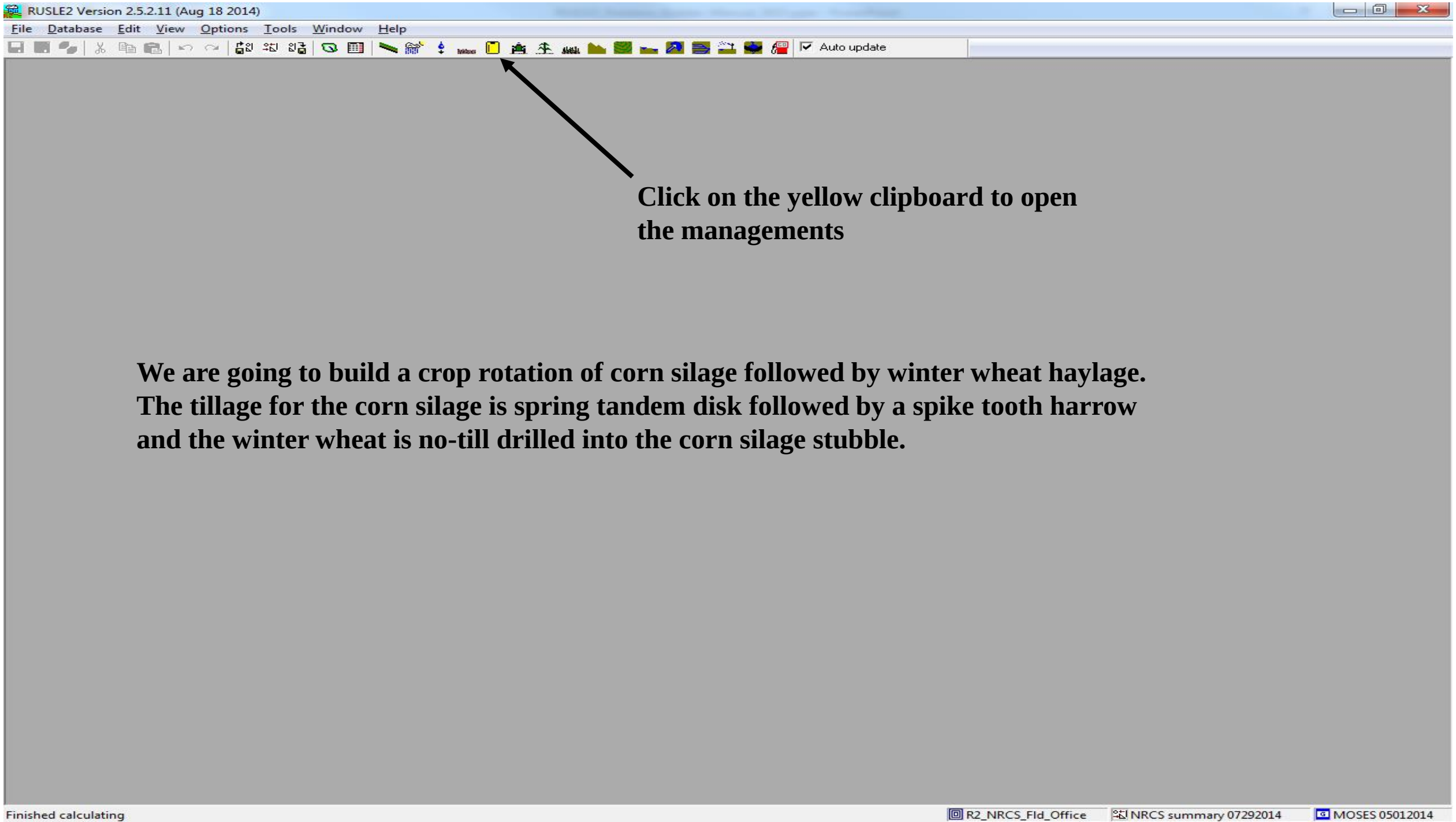

Change Database
Autofix -- automatically fix broken links based on name
\
climates
contour-systems
deep-soil-drain-systems
erosivities
fuels
hydraulic-element-flow-paths
hydraulic-element-systems
hydraulic-elements
irrigation-systems
managements
operations
permeable-barriers
plans
profiles
residues
soils
strip-barrier-systems
structures-barriers
vegetations
worksheets
Name
Modif...
Owner
Group
Permi...
Double-click on managements
Close


Change Database
Autofix -- automatically fix broken links based on name
\
climates
contour-systems
deep-soil-drain-systems
erosivities
fuels
hydraulic-element-flow-paths
hydraulic-element-systems
hydraulic-elements
irrigation-systems
managements
CMZ 62
CMZ 63
Strip/Barrier Managements
operations
permeable-barriers
plans
profiles
residues
soils
strip-barrier-systems
Name
Modif...
Owner
Group
Permi...
Continuously tilled a...
02/0...
dave....
R2_...
default
09/2...
dave....
R2_...
RWCD
Then double-click on the CMZ63 folder, or the CMZ folder your client is located in…
Close

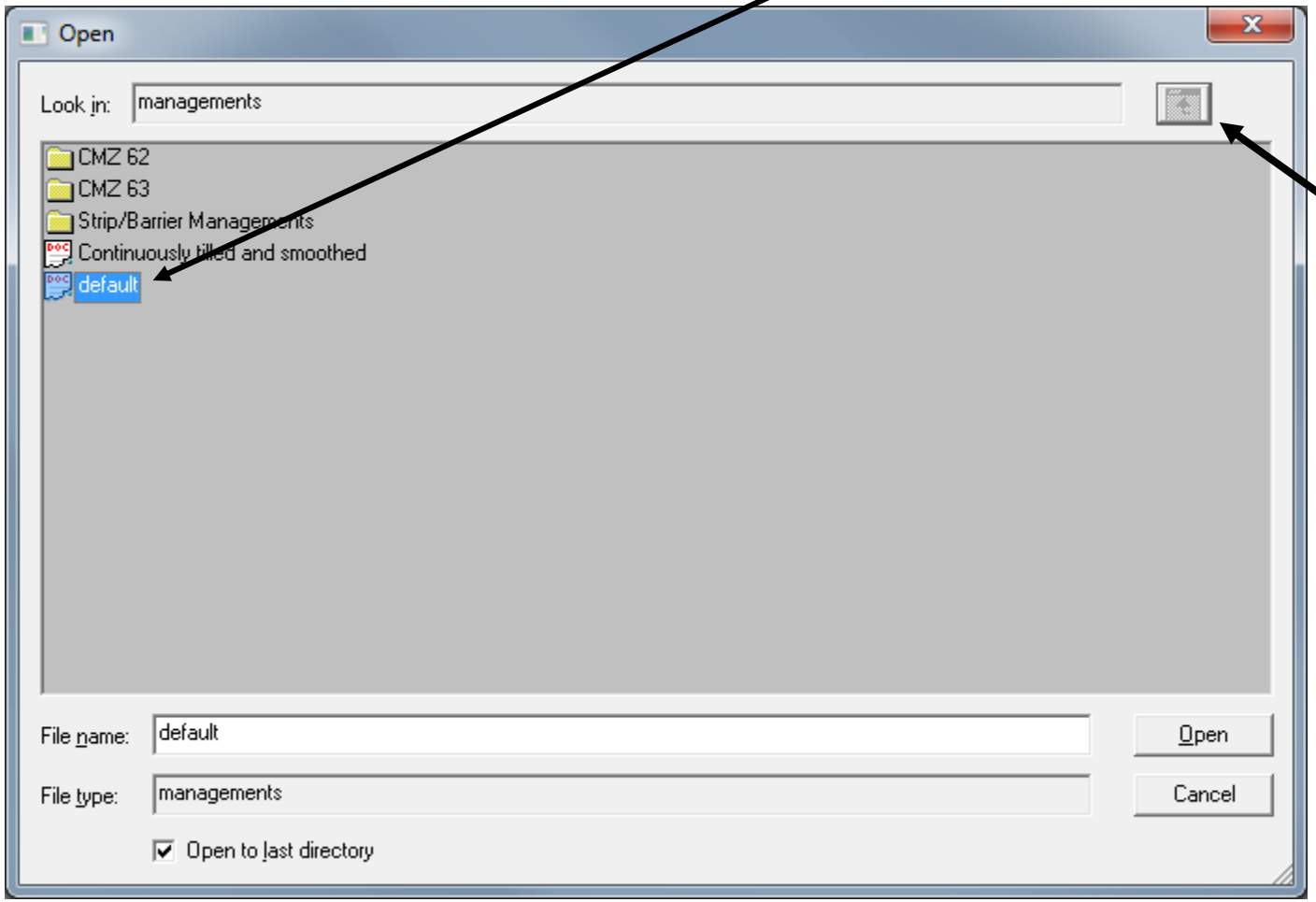

Change Database
Autofix -- automatically fix broken links based on name
\
climates
contour-systems
deep-soil-drain-systems
erosivities
fuels
hydraulic-element-flow-paths
hydraulic-element-systems
hydraulic-elements
irrigation-systems
managements
CMZ 62
CMZ 63
a.Single Year/Single Crop Templates
b.Mullti-year Rotation Templates
c.Other Local Mgt Records
d.Construction Site Templates
Strip/Barrier Managements
operations
permeable-barriers
plans
profiles
Name
Modified
Owner
Group
Permissions
Then right-mouse click on the c. Other Local Mgt Records folder and select "New folder"
Close


Change Database
Autofix -- automatically fix broken links based on name
CMZ 63
a.Single Year/Single Crop Templates
b.Mullti-year Rotation Templates
c.Other Local Mgt Records
New Folder
Allen Farm
Corbin
Crist
Danny Marsh
David Hord
Doby Hog Farm
Edgeview Farm
EKU Farm
Fayette CNMP
klngenfus
Long Farms
mmp_calc
MSU Farm
Steve Jackson
Taulbee, James
Twin Oak Farms
UK Farm
Name
Modified
Owner
Group
Permissions
Rename the New Folder to your client's farm name
Close


Change Database
Autofix -- automatically fix broken links based on name
CMZ 63
a.Single Year/Single Crop Templates
b.Mullti-year Rotation Templates
c.Other Local Mgt Records
South View Farm
Allen Farm
Corbin
Crist
Danny Marsh
David Hord
Doby Hog Farm
Edgeview Farm
EKU Farm
Fayette CNMP
klngenfus
Long Farms
mmp_calc
MSU Farm
Steve Jackson
Taulbee, James
Twin Oak Farms
UK Farm
Name
Modified
Owner
Group
Permissions
My example client is the South View Farm
Click "Close" when finished
Close

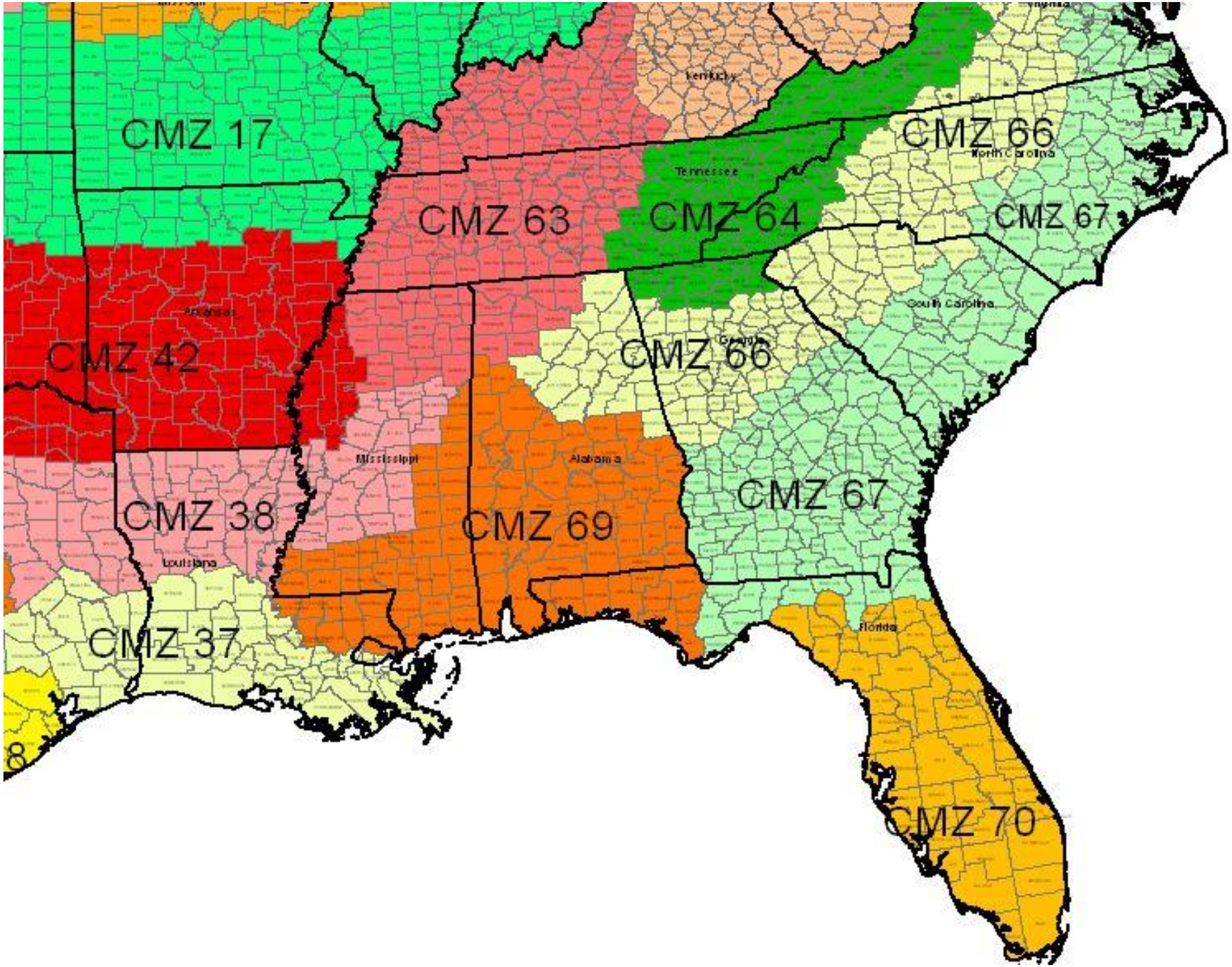

RUSLE2 Version 2.5.2.11 (Aug 18 2014)
File Database Edit View Options Tools Window Help
Auto update
Click on the yellow clipboard to open the managements
We are going to build a crop rotation of corn silage followed by winter wheat haylage. The tillage for the corn silage is spring tandem disk followed by a spike tooth harrow and the winter wheat is no-till drilled into the corn silage stubble.
Finished calculating
R2_NRCS_Fld_Office
NRCS summary 07292014
MOSES 05012014

Highlight the default file and click “Open”



You might need to up scroll to find the default file…

Most of Kentucky is located in the Crop Management Zone 63 CMZ63



RUSLE2 Version 2.5.2.11 (Aug 18 2014)

File Database Edit View Options Tools Window Help

Auto update

Management: default

Graphic
Rel. row grade, % 100

Add to this management to make new one: Open

View/edit rotation builder used to make this management: open

Irrigation system: no irrigation

Long-term natural rough., mm 6.0
Normally used as a rotation? Yes
Duration, yr 1

Fuel for all operations: Local\Diesel
Base equiv. diesel use, gal/ac 1.00
Base energy use , BTU/ac 140000
Base fuel cost, US$/ac 3.500

(MAN_STIR) 0.15

(AVG_ANNUAL_MAN_ 0.15

MAN_OP_VEG_CROP_YEAR_EN ...D_START_SET_CHOICE_KILL

Crop Year STIR Values

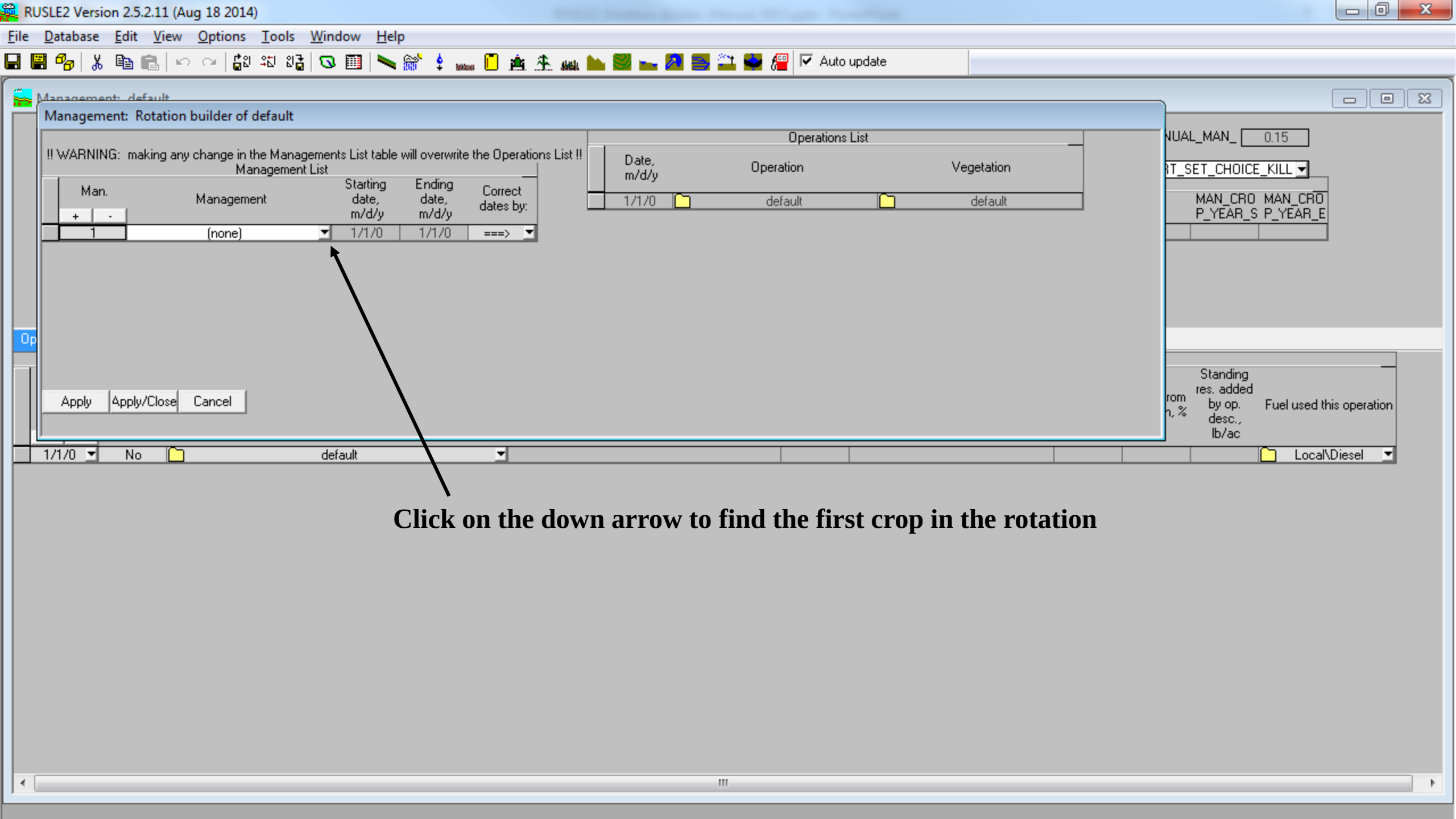
	(MAN_CROP_YEAR	(MAN_CROP_YEAR	MAN_CROP_YEAR_CROP_NAME	MAN_CROP_YEAR_S	MAN_CROP_YEAR_E
	1				

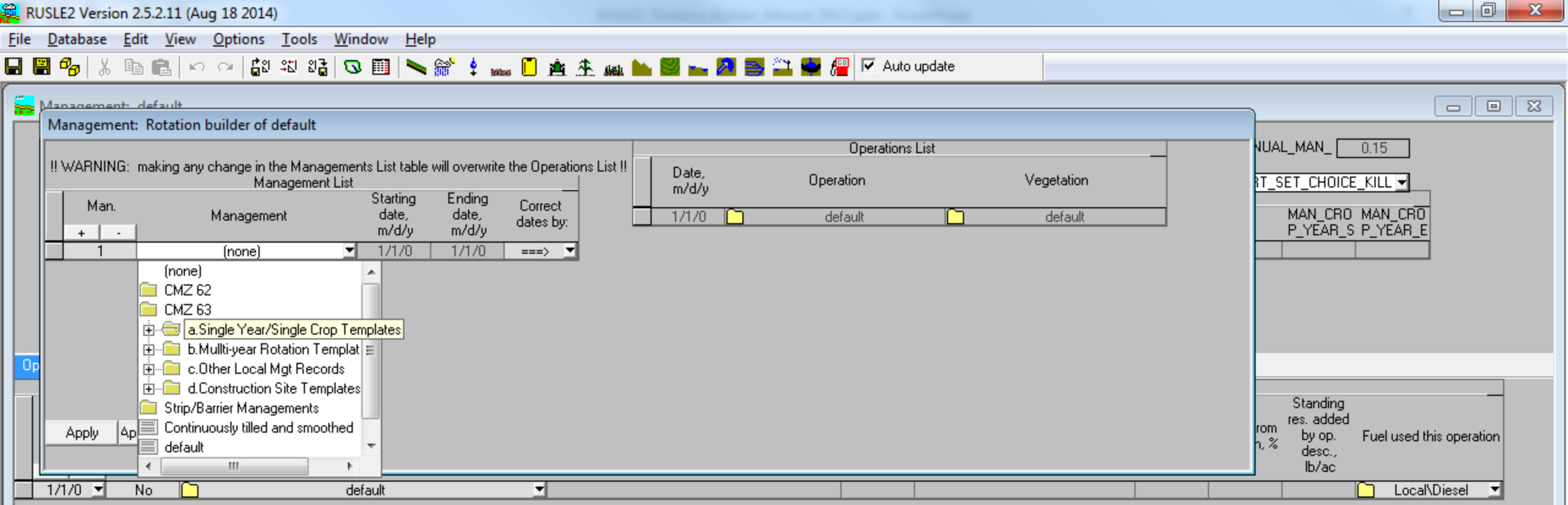
Operations | Info

Management Operations

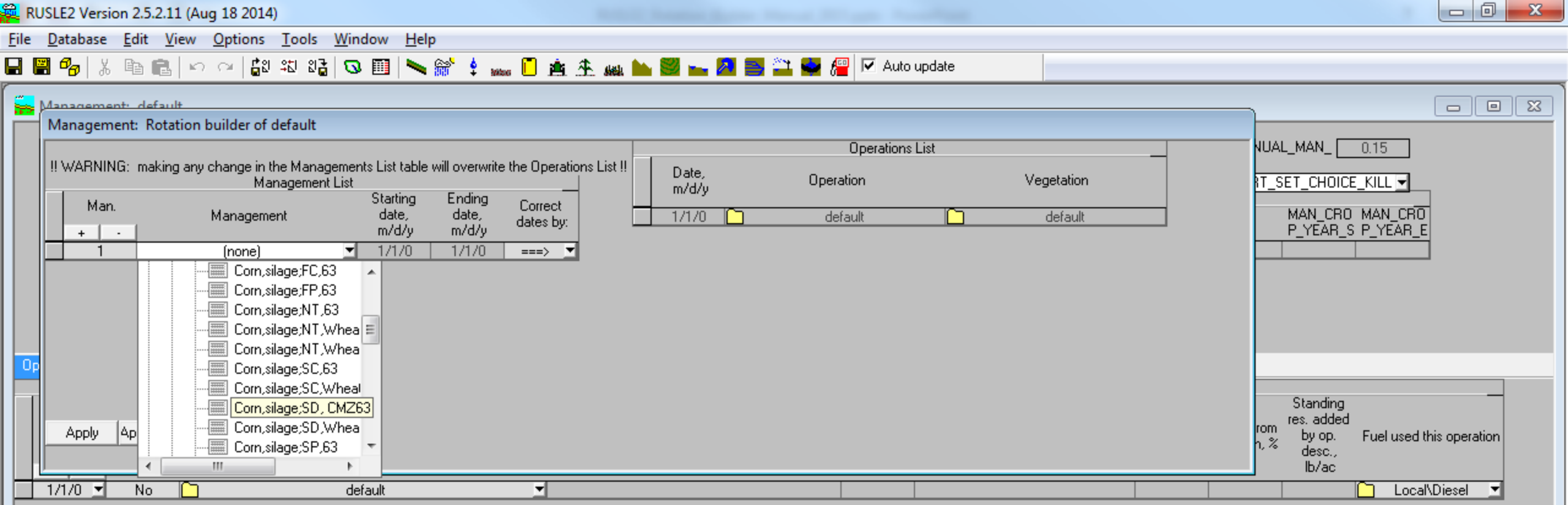
Date, m/d/y	MAN_OP_VEG_CROP_YEAR_END_START	Operation	Vegetation	Yield (# harv. units), U_NUM_P_ACRE	Type of cover material	Cover matl add/remove, lb/ac	Cover from addition, %	Standing res. added by op. desc., lb/ac	Fuel used this operation
1/1/0	No	default							Local\Diesel

Click on the yellow folder to activate the rotation builder


RUSLE2 Version 2.5.2.11 (Aug 18 2014)
File Database Edit View Options Tools Window Help
Auto update
Management: Rotation builder of default
!! WARNING: making any change in the Managements List table will overwrite the Operations List !!
Management List
Man.
Management
Starting date, m/d/y
Ending date, m/d/y
Correct dates by:
1
(none)
1/1/0
1/1/0
===>
Apply
Apply/Close
Cancel
Operations List
Date, m/d/y
Operation
Vegetation
1/1/0
default
default
0.15
Standing res. added by op. desc., lb/ac
Fuel used this operation
1/1/0
No
default
Local\Diesel
Click on the down arrow to find the first crop in the rotation



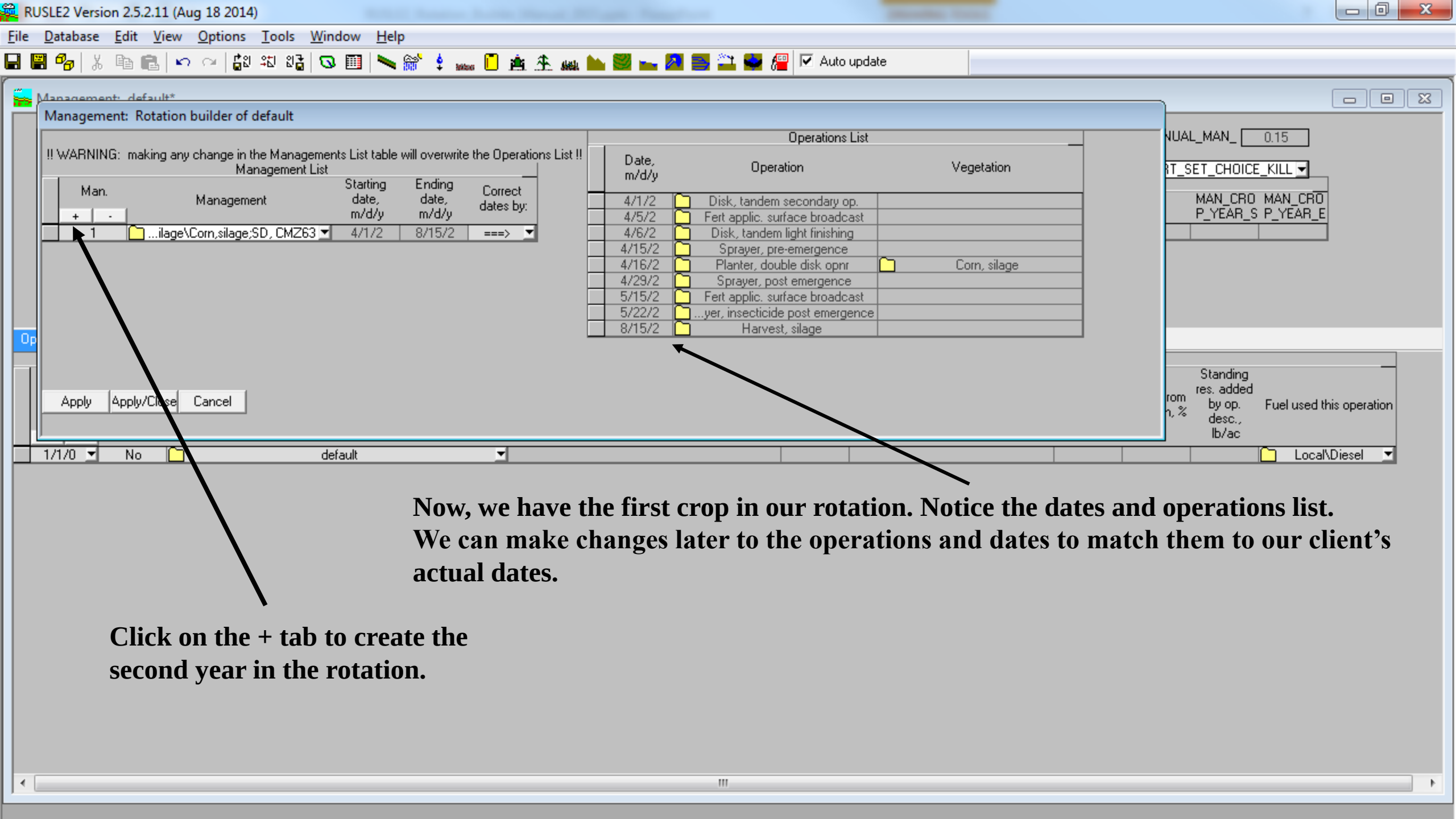
Click on the CMZ 63 a. Single Year/Single Crop Templates folder, then double click on the "Corn, Silage" subfolder…



Double-click on the ”Corn,silage,SD, CMZ63 file”…

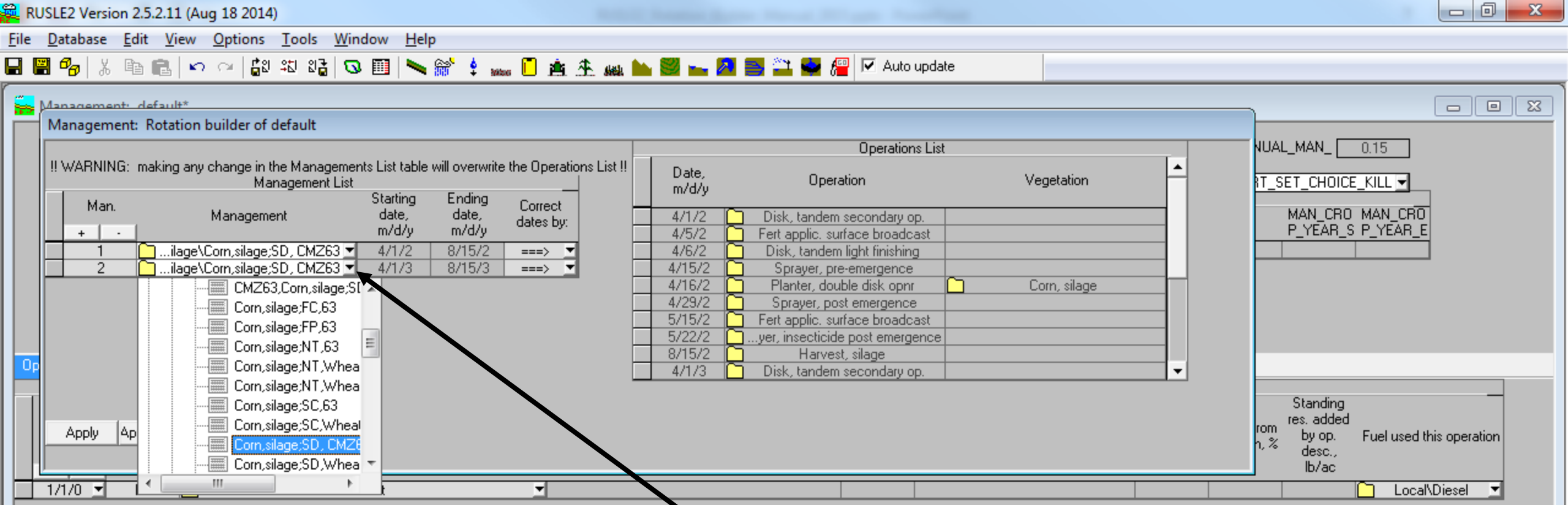
SD = Spring disk
SC – Spring chisel
SP = Spring plow
NT = No till

FD = Fall disk
FC = Fall chisel
FP = Fall plow

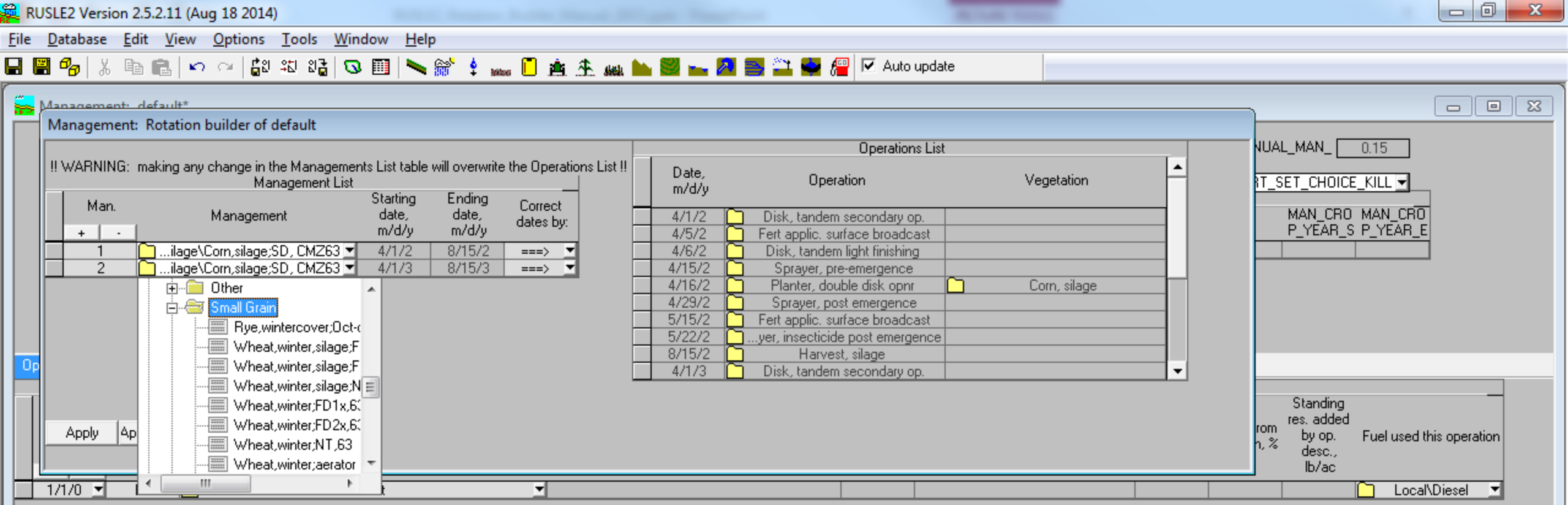


Now, we have the first crop in our rotation. Notice the dates and operations list. We can make changes later to the operations and dates to match them to our client's actual dates.

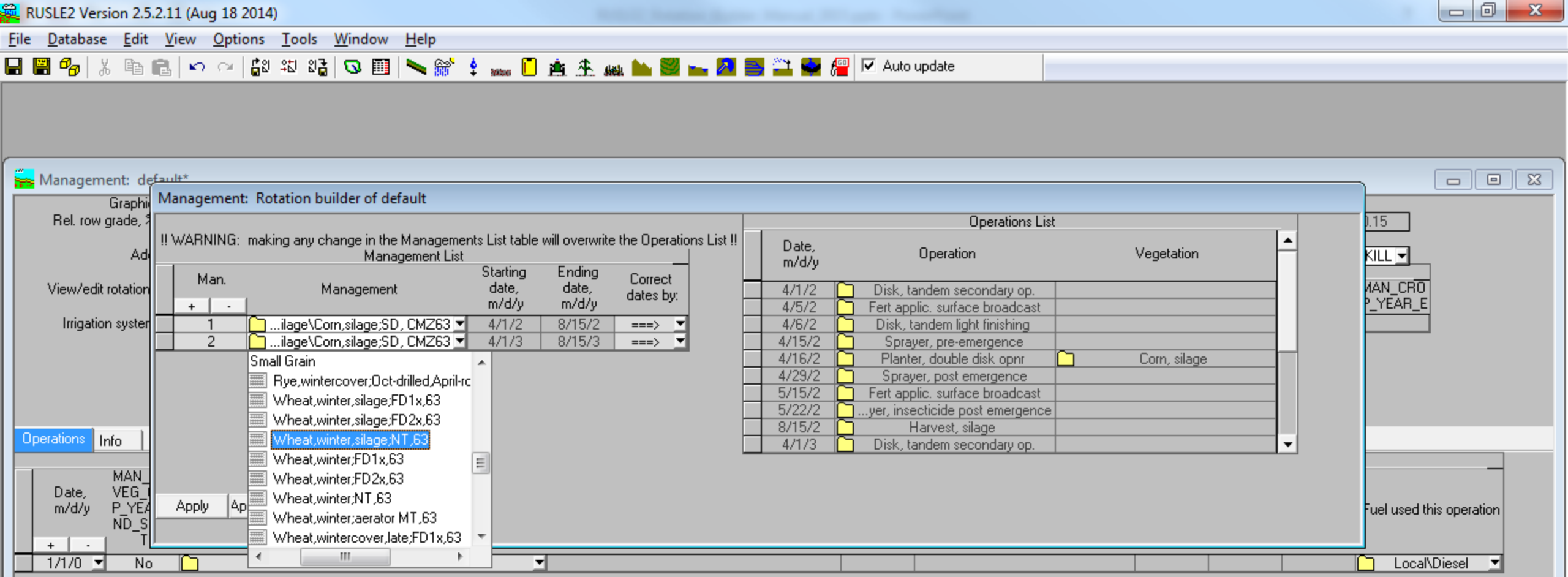
Click on the + tab to create the second year in the rotation.



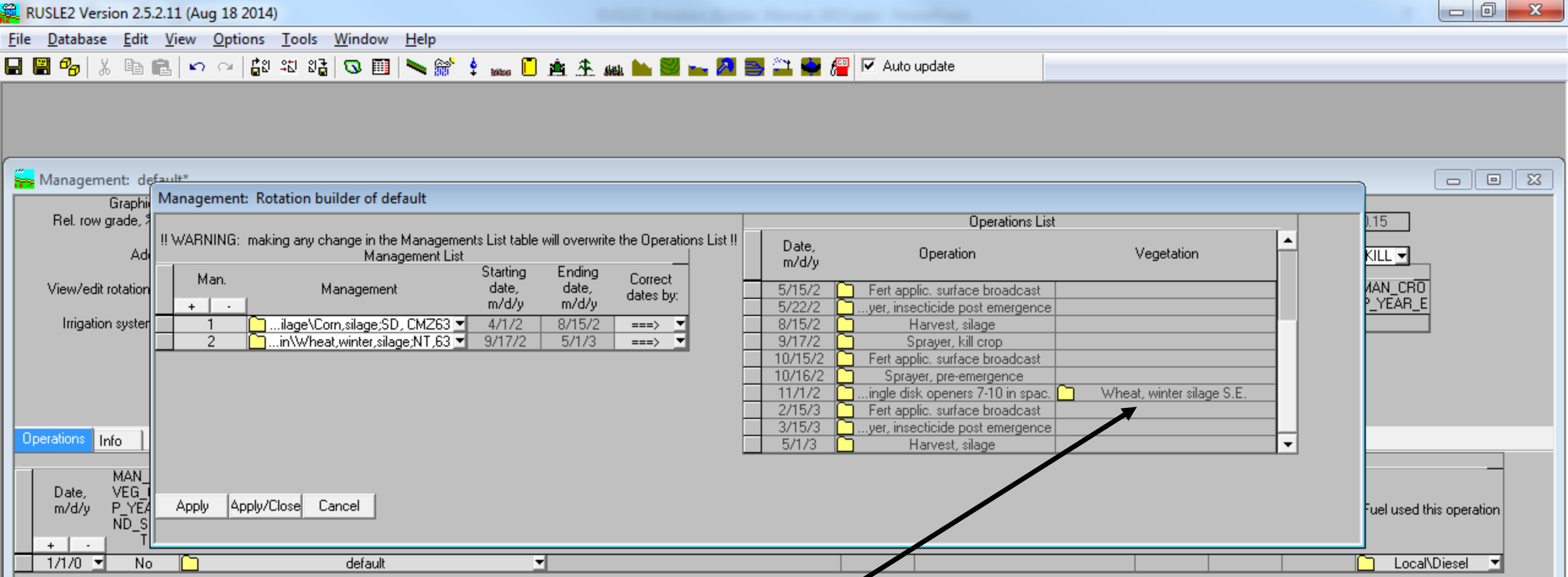
Click on the down arrow and scroll down to find the Small Grain folder



Double click on the Small Grain folder and find the “Wheat, winter, silage, NT, 63” file.



Double click on the “Wheat,winter,silage,NT;63” file.



Now, we have both crops in our rotation.

Click on “Apply/Close” to open the entire rotation for edits.

Management: default*

Graphic
Rel. row grade, % 100

Add to this management to make new one: Open

View/edit rotation builder used to make this management: open

Irrigation system: no irrigation

Long-term natural rough., mm 6.0
Normally used as a rotation? Yes
Duration, yr 2

Fuel for all operations: Local\Diesel
Base equiv. diesel use, gal/ac 4.99
Base energy use , BTU/ac 690000
Base fuel cost, US$/ac 17.47

(MAN_STIR) 59

(AVG_ANNUAL_MAN_ 29

MAN_OP_VEG_CROP_YEAR_EN ...D_START_SET_CHOICE_KILL

Crop Year STIR Values

	(MAN_CROP_YEAR	(MAN_CROP_YEAR	MAN_CROP_YEAR_CROP_NAME	MAN_CROP_YEAR_S	MAN_CROP_YEAR_E
	1	55	Corn, silage	5/2/1	8/15/2
	2	3.3	Wheat, winter silage S.E.	8/16/2	5/1/3

Operations | Info

Management Operations

Date, m/d/y	MAN_OP_VEG_CROP_YEAR_END_START	Operation	Vegetation	Yield (# harv. units), U_NUM_P_ACRE	Type of cover material	Cover matl add/remove, lb/ac	Cover from addition, %	Standing res. added by op. desc., lb/ac	Fuel used this operation
4/1/2	No	Disk, tandem secondary op.							Local\Diesel
4/5/2	No	Fert applic. surface broadcast							Local\Diesel
4/6/2	No	Disk, tandem light finishing							Local\Diesel
4/15/2	No	Sprayer, pre-emergence							Local\Diesel
4/16/2	No	Planter, double disk opnr	Corn, silage	19.0					Local\Diesel
4/29/2	No	Sprayer, post emergence			weeds; 0-3 mo	50	2.9		Local\Diesel
5/15/2	No	Fert applic. surface broadcast							Local\Diesel
5/22/2	No	Sprayer, insecticide post emergence							Local\Diesel
8/15/2	Yes	Harvest, silage				760	25	800	Local\Diesel
9/17/2	No	Sprayer, kill crop							Local\Diesel
10/15/2	No	Fert applic. surface broadcast							Local\Diesel
10/16/2	No	Sprayer, pre-emergence							Local\Diesel
11/1/2	No	Drill or air seeder single disk openers 7-10 in spac.	Wheat, winter silage S.E.	11.0					Local\Diesel
2/15/3	No	Fert applic. surface broadcast							Local\Diesel
3/15/3	No	Sprayer, insecticide post emergence							Local\Diesel
5/1/3	Yes	Harvest, silage				320	17	340	Local\Diesel

Our client harvests the winter wheat in 5 inches height to improve soil health and to reduce soil erosion. Change the "Harvest, silage" file to "Harvest, small grain haylage 5 in ht" by clicking on the down arrow…

RUSLE2 Version 2.5.2.11 (Aug 18 2014)

File Database Edit View Options Tools Window Help

Auto update

Management: default*

Graphic
Rel. row grade, % 100

Add to this management to make new one: Open

View/edit rotation builder used to make this management: open

Irrigation system: no irrigation

Long-term natural rough., mm 6.0
Normally used as a rotation? Yes
Duration, yr 2

Fuel for all operations: Local\Diesel
Base equiv. diesel use, gal/ac 7.77
Base energy use , BTU/ac 1100000
Base fuel cost, US$/ac 27.20

(MAN_STIR) 59

(AVG_ANNUAL_MAN_ 29

MAN_OP_VEG_CROP_YEAR_EN ...D_START_SET_CHOICE_KILL

Crop Year STIR Values

(MAN_CROP_YEAR	(MAN_CROP_YEAR	MAN_CROP_YEAR_CROP_NAME	MAN_CROP_YEAR_S	MAN_CROP_YEAR_E
1	55	Corn, silage	6/11/1	8/15/2
2	3.5	Wheat, winter silage S.E.	8/16/2	6/10/3

Operations | Info

Management Operations

Date, m/d/y	MAN_OP_VEG_CROP_YEAR_END_START	Operation	Vegetation	Yield (# harv. units), U_NUM_P_ACRE	Type of cover material	Cover matl add/remove, lb/ac	Cover from addition, %	Standing res. added by op. desc., lb/ac	Fuel used this operation
4/1/2	No	Disk, tandem secondary op.							Local\Diesel
4/5/2	No	Fert applic. surface broadcast							Local\Diesel
4/6/2	No	Disk, tandem light finishing							Local\Diesel
4/15/2	No	Sprayer, pre-emergence							Local\Diesel
4/16/2	No	Planter, double disk opnr	Corn, silage	19.0					Local\Diesel
4/29/2	No	Sprayer, post emergence			weeds; 0-3 mo	50	2.9		Local\Diesel
5/15/2	No	Fert applic. surface broadcast							Local\Diesel
5/22/2	No	Sprayer, insecticide post emergence							Local\Diesel
8/15/2	Yes	Harvest, silage				650	22	680	Local\Diesel
10/30/2	No	Sprayer, kill crop							Local\Diesel
10/31/2	No	Fert applic. surface broadcast							Local\Diesel
11/1/2	No	Drill or air seeder single disk openers 7-10 in spac.	Wheat, winter silage S.E.	11.0					Local\Diesel
11/15/2	No	Sprayer, post emergence			weeds; 0-3 mo	50	2.9		Local\Diesel
2/15/3	No	Fert applic. surface broadcast							Local\Diesel
3/15/3	No	Sprayer, insecticide post emergence							Local\Diesel
5/15/3	No	Sprayer, insecticide post emergence							Local\Diesel
6/10/3	Yes	Harvest, small grain haylage 5 in ht				220	12	660	Local\Diesel

We need to adjust the yields to the client's realistic yield goals by overwriting the default yield values.

RUSLE2 Version 2.5.2.11 (Aug 18 2014)

File Database Edit View Options Tools Window Help

Auto update

Management: default*

Graphic
Rel. row grade, % 100

Add to this management to make new one: Open

View/edit rotation builder used to make this management: open

Irrigation system: no irrigation

Long-term natural rough., mm 6.0
Normally used as a rotation? Yes
Duration, yr 2

Fuel for all operations: Local\Diesel
Base equiv. diesel use, gal/ac 7.77
Base energy use , BTU/ac 1100000
Base fuel cost, US$/ac 27.20

(MAN_STIR) 59

(AVG_ANNUAL_MAN_ 29

MAN_OP_VEG_CROP_YEAR_EN ...D_START_SET_CHOICE_KILL

Crop Year STIR Values

(MAN_CROP_YEAR	(MAN_CROP_YEAR	MAN_CROP_YEAR_CROP_NAME	MAN_CROP_YEAR_S	MAN_CROP_YEAR_E
1	55	Corn, silage	6/11/1	8/15/2
2	3.5	Wheat, winter silage S.E.	8/16/2	6/10/3

Operations | Info

Management Operations

Date, m/d/y	MAN_OP_VEG_CROP_YEAR_END_START	Operation	Vegetation	Yield (# harv. units), U_NUM_P_ACRE	Type of cover material	Cover matl add/remove, lb/ac	Cover from addition, %	Standing res. added by op. desc., lb/ac	Fuel used this operation
4/1/2	No	Disk, tandem secondary op.							Local\Diesel
4/5/2	No	Fert applic. surface broadcast							Local\Diesel
4/6/2	No	Disk, tandem light finishing							Local\Diesel
4/15/2	No	Sprayer, pre-emergence							Local\Diesel
4/16/2	No	Planter, double disk opnr	Corn, silage	22.0					Local\Diesel
4/29/2	No	Sprayer, post emergence			weeds; 0-3 mo	50	2.9		Local\Diesel
5/15/2	No	Fert applic. surface broadcast							Local\Diesel
5/22/2	No	Sprayer, insecticide post emergence							Local\Diesel
8/15/2	Yes	Harvest, silage				740	24	770	Local\Diesel
10/30/2	No	Sprayer, kill crop							Local\Diesel
10/31/2	No	Fert applic. surface broadcast							Local\Diesel
11/1/2	No	Drill or air seeder single disk openers 7-10 in spac.	Wheat, winter silage S.E.	14.0					Local\Diesel
11/15/2	No	Sprayer, post emergence			weeds; 0-3 mo	50	2.9		Local\Diesel
2/15/3	No	Fert applic. surface broadcast							Local\Diesel
3/15/3	No	Sprayer, insecticide post emergence							Local\Diesel
5/15/3	No	Sprayer, insecticide post emergence							Local\Diesel
6/10/3	Yes	Harvest, small grain haylage 5 in ht				280	15	830	Local\Diesel

I entered 22 Tons for the corn silage and 14 Tons for the wheat silage.

View/edit rotation builder used to make this management | open

Irrigation system: no irrigation

Base equiv. diesel use, gal/ac	7.64
Base energy use , BTU/ac	1100000
Base fuel cost, US$/ac	26.74

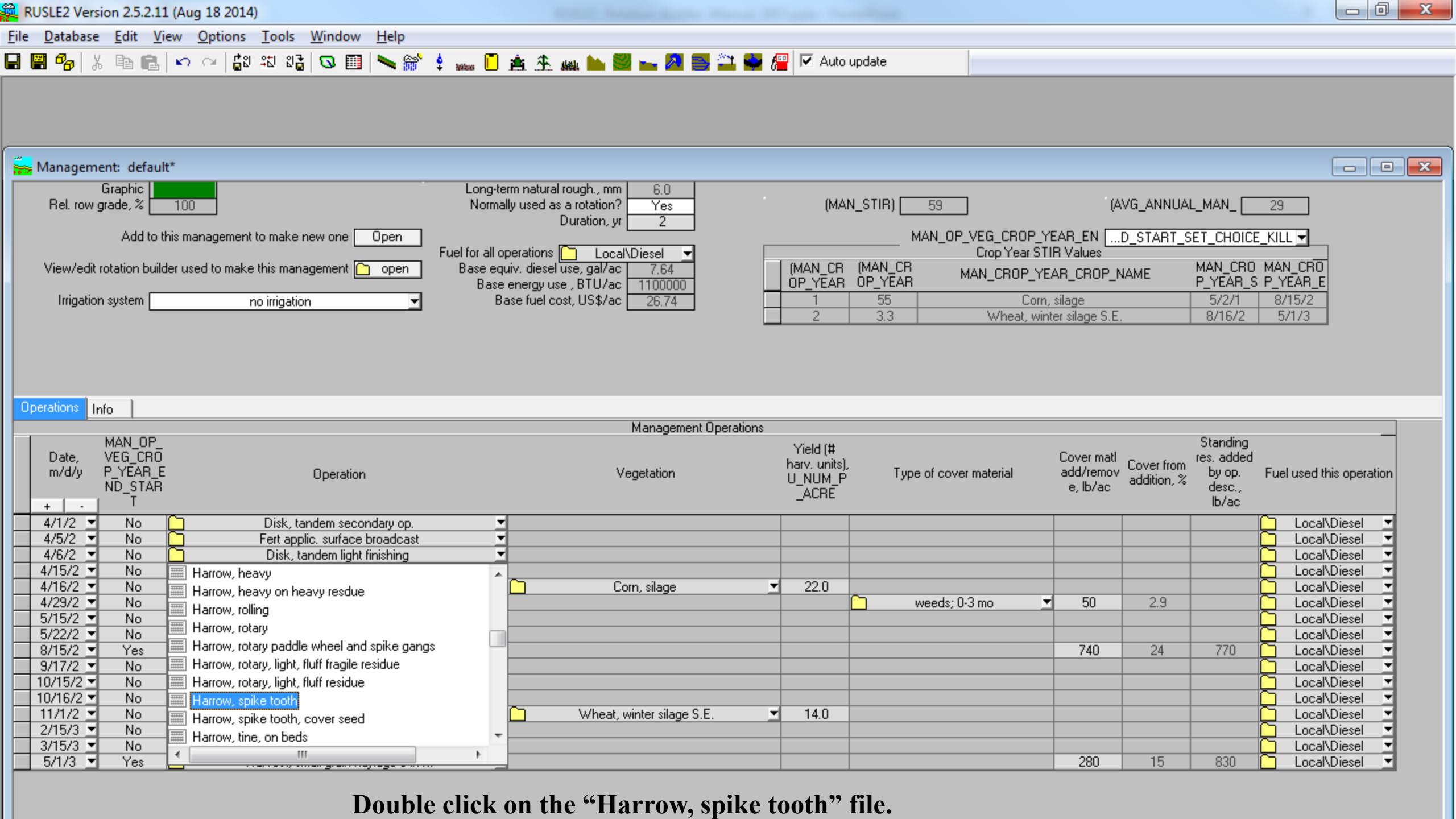
	(MAN_CROP_YEAR)	(MAN_CROP_YEAR)	MAN_CROP_YEAR_CROP_NAME	MAN_CROP_YEAR_S	MAN_CROP_YEAR_E
	1	55	Corn, silage	5/2/1	8/15/2
	2	3.3	Wheat, winter silage S.E.	8/16/2	5/1/3

Operations | Info

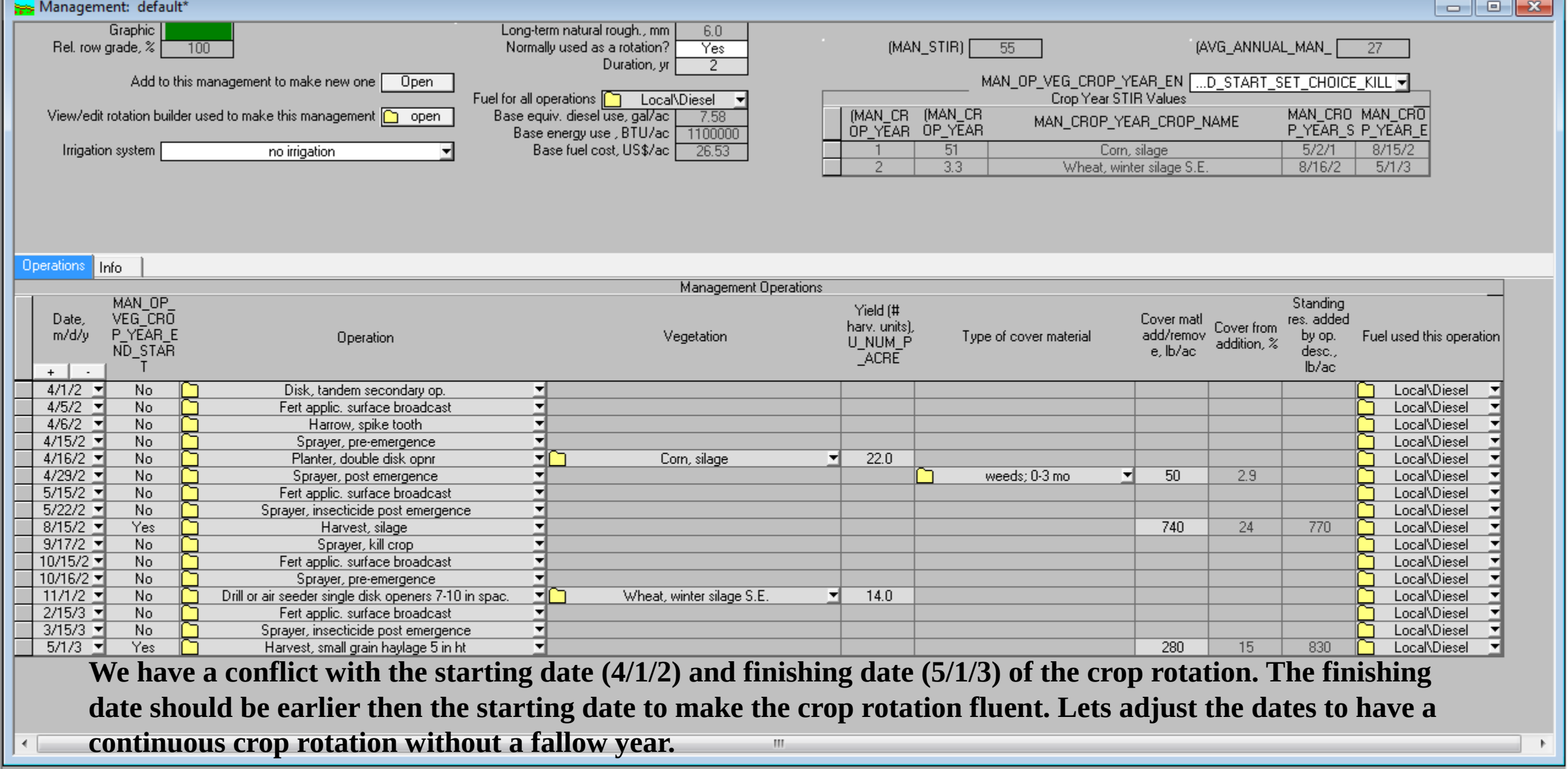
Management Operations

Date, m/d/y	MAN_OP_VEG_CROP_YEAR_END_START	Operation	Vegetation	Yield (# harv. units), U_NUM_P_ACRE	Type of cover material	Cover matl add/remove, lb/ac	Cover from addition, %	Standing res. added by op. desc., lb/ac	Fuel used this operation
4/1/2	No	Disk, tandem secondary op.							Local\Diesel
4/5/2	No	Fert applic. surface broadcast							Local\Diesel
4/6/2	No	Disk, tandem light finishing							Local\Diesel
4/15/2	No	Sprayer, pre-emergence							Local\Diesel
4/16/2	No	Planter, double disk opnr	Corn, silage	22.0					Local\Diesel
4/29/2	No	Sprayer, post emergence			weeds; 0-3 mo	50	2.9		Local\Diesel
5/15/2	No	Fert applic. surface broadcast							Local\Diesel
5/22/2	No	Sprayer, insecticide post emergence							Local\Diesel
8/15/2	Yes	Harvest, silage				740	24	770	Local\Diesel
9/17/2	No	Sprayer, kill crop							Local\Diesel
10/15/2	No	Fert applic. surface broadcast							Local\Diesel
10/16/2	No	Sprayer, pre-emergence							Local\Diesel
11/1/2	No	Drill or air seeder single disk openers 7-10 in spac.	Wheat, winter silage S.E.	14.0					Local\Diesel
2/15/3	No	Fert applic. surface broadcast							Local\Diesel
3/15/3	No	Sprayer, insecticide post emergence							Local\Diesel
5/1/3	Yes	Harvest, small grain haylage 5 in ht				280	15	830	Local\Diesel

We need to change the second disking operation (4/6/2) to a spike tooth harrow operation to match our client's actual tillage implementation schedule.
Click on the down arrow and find the "Harrow, spike tooth" file and double click on it.



Double click on the “Harrow, spike tooth” file.



We have a conflict with the starting date (4/1/2) and finishing date (5/1/3) of the crop rotation. The finishing date should be earlier then the starting date to make the crop rotation fluent. Lets adjust the dates to have a continuous crop rotation without a fallow year.

Management: default*

Graphic
Rel. row grade, % 100

Add to this management to make new one: Open

View/edit rotation builder used to make this management: open

Irrigation system: no irrigation

Long-term natural rough., mm 6.0
Normally used as a rotation? Yes
Duration, yr 1

Fuel for all operations: Local\Diesel
Base equiv. diesel use, gal/ac 7.58
Base energy use , BTU/ac 1100000
Base fuel cost, US$/ac 26.53

(MAN_STIR) 55

(AVG_ANNUAL_MAN_ 55

MAN_OP_VEG_CROP_YEAR_EN ...D_START_SET_CHOICE_KILL

Crop Year STIR Values

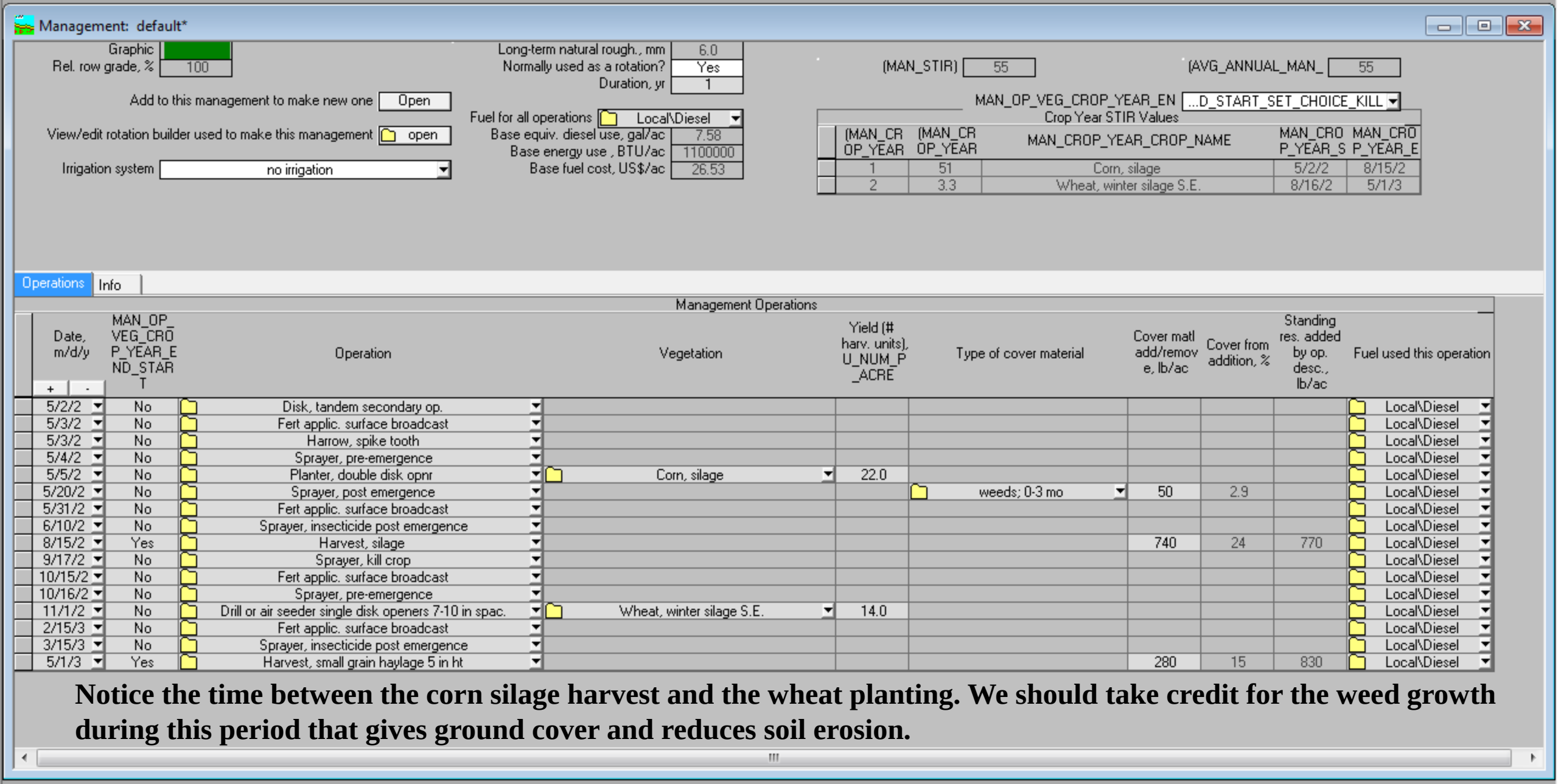
(MAN_CROP_YEAR	(MAN_CROP_YEAR	MAN_CROP_YEAR_CROP_NAME	MAN_CROP_YEAR_S	MAN_CROP_YEAR_E
1	51	Corn, silage	5/2/2	8/15/2
2	3.3	Wheat, winter silage S.E.	8/16/2	5/1/3

Operations | Info

Management Operations

Date, m/d/y	MAN_OP_VEG_CROP_YEAR_END_START	Operation	Vegetation	Yield (# harv. units), U_NUM_P_ACRE	Type of cover material	Cover matl add/remove, lb/ac	Cover from addition, %	Standing res. added by op. desc., lb/ac	Fuel used this operation
5/2/2	No	Disk, tandem secondary op.							Local\Diesel
5/3/2	No	Fert applic. surface broadcast							Local\Diesel
5/3/2	No	Harrow, spike tooth							Local\Diesel
5/4/2	No	Sprayer, pre-emergence							Local\Diesel
5/5/2	No	Planter, double disk opnr	Corn, silage	22.0					Local\Diesel
5/20/2	No	Sprayer, post emergence			weeds; 0-3 mo	50	2.9		Local\Diesel
5/31/2	No	Fert applic. surface broadcast							Local\Diesel
6/10/2	No	Sprayer, insecticide post emergence							Local\Diesel
8/15/2	Yes	Harvest, silage				740	24	770	Local\Diesel
9/17/2	No	Sprayer, kill crop							Local\Diesel
10/15/2	No	Fert applic. surface broadcast							Local\Diesel
10/16/2	No	Sprayer, pre-emergence							Local\Diesel
11/1/2	No	Drill or air seeder single disk openers 7-10 in spac.	Wheat, winter silage S.E.	14.0					Local\Diesel
2/15/3	No	Fert applic. surface broadcast							Local\Diesel
3/15/3	No	Sprayer, insecticide post emergence							Local\Diesel
5/1/3	Yes	Harvest, small grain haylage 5 in ht				280	15	830	Local\Diesel

I adjusted the operation dates to have a fluent continuous crop rotation without a fallow year.



Notice the time between the corn silage harvest and the wheat planting. We should take credit for the weed growth during this period that gives ground cover and reduces soil erosion.

Management: default*

Graphic
Rel. row grade, % 100

Add to this management to make new one: Open

View/edit rotation builder used to make this management: open

Irrigation system: no irrigation

Long-term natural rough., mm 6.0
Normally used as a rotation? Yes
Duration, yr 1

Fuel for all operations: Local\Diesel
Base equiv. diesel use, gal/ac 7.58
Base energy use , BTU/ac 1100000
Base fuel cost, US$/ac 26.53

(MAN_STIR) 55

(AVG_ANNUAL_MAN_ 55

MAN_OP_VEG_CROP_YEAR_EN ...D_START_SET_CHOICE_KILL

Crop Year STIR Values

(MAN_CROP_YEAR	(MAN_CROP_YEAR	MAN_CROP_YEAR_CROP_NAME	MAN_CROP_YEAR_S	MAN_CROP_YEAR_E
1	51	Corn, silage	5/2/2	8/15/2
2	3.3	Wheat, winter silage S.E.	8/16/2	5/1/3

Operations | Info

Management Operations

Date, m/d/y	MAN_OP_VEG_CROP_YEAR_END_START	Operation	Vegetation	Yield (# harv. units), U_NUM_P_ACRE	Type of cover material	Cover matl add/remove, lb/ac	Cover from addition, %	Standing res. added by op. desc., lb/ac	Fuel used this operation
5/2/2	No	Disk, tandem secondary op.							Local\Diesel
5/3/2	No	Fert applic. surface broadcast							Local\Diesel
5/3/2	No	Harrow, spike tooth							Local\Diesel
5/4/2	No	Sprayer, pre-emergence							Local\Diesel
5/5/2	No	Planter, double disk opnr	Corn, silage	22.0					Local\Diesel
5/20/2	No	Sprayer, post emergence			weeds; 0-3 mo	50	2.9		Local\Diesel
5/31/2	No	Fert applic. surface broadcast							Local\Diesel
6/10/2	No	Sprayer, insecticide post emergence							Local\Diesel
8/15/2	Yes	Harvest, silage				740	24	770	Local\Diesel
9/17/2	No	Sprayer, kill crop							Local\Diesel
10/15/2	No	Fert applic. surface broadcast							Local\Diesel
10/16/2	No	Sprayer, pre-emergence							Local\Diesel
11/1/2	No	Drill or air seeder single disk openers 7-10 in spac.	Wheat, winter silage S.E.	14.0					Local\Diesel
2/15/3	No	Fert applic. surface broadcast							Local\Diesel
3/15/3	No	Sprayer, insecticide post emergence							Local\Diesel
5/1/3	Yes	Harvest, small grain haylage 5 in ht				280	15	830	Local\Diesel

Hover over the small grey box in front of the date 8/15/2 – the cursor will turn into a black arrow – click on that grey box and the whole row will become highlighted. Now, click on the + button above the dates to duplicate that highlighted row.

Management: default*

Graphic
Rel. row grade, % 100

Add to this management to make new one: Open

View/edit rotation builder used to make this management: open

Irrigation system: no irrigation

Long-term natural rough., mm 6.0
Normally used as a rotation? Yes
Duration, yr 1

Fuel for all operations: Local\Diesel
Base equiv. diesel use, gal/ac 8.53
Base energy use , BTU/ac 1200000
Base fuel cost, US$/ac 29.86

(MAN_STIR) 55

(AVG_ANNUAL_MAN_ 55

MAN_OP_VEG_CROP_YEAR_EN ..._START_SET_CHOICE_USER

Crop Year STIR Values

	(MAN_CROP_YEAR	(MAN_CROP_YEAR	MAN_CROP_YEAR_CROP_NAME	MAN_CROP_YEAR_S	MAN_CROP_YEAR_E
	1				

Operations | Info

Management Operations

Date, m/d/y	MAN_OP_VEG_CROP_YEAR_END_START	Operation	Vegetation	Yield (# harv. units), U_NUM_P_ACRE	Type of cover material	Cover matl add/remove, lb/ac	Cover from addition, %	Standing res. added by op. desc., lb/ac	Fuel used this operation
5/2/2	No	Disk, tandem secondary op.							Local\Diesel
5/3/2	No	Fert applic. surface broadcast							Local\Diesel
5/3/2	No	Harrow, spike tooth							Local\Diesel
5/4/2	No	Sprayer, pre-emergence							Local\Diesel
5/5/2	No	Planter, double disk opnr	Corn, silage	22.0					Local\Diesel
5/20/2	No	Sprayer, post emergence			weeds; 0-3 mo	50	2.9		Local\Diesel
5/31/2	No	Fert applic. surface broadcast							Local\Diesel
6/10/2	No	Sprayer, insecticide post emergence							Local\Diesel
8/15/2	No	Harvest, silage				740	24	770	Local\Diesel
8/16/2	No	Harvest, silage							Local\Diesel
9/17/2	No	Sprayer, kill crop							Local\Diesel
10/15/2	No	Fert applic. surface broadcast							Local\Diesel
10/16/2	No	Sprayer, pre-emergence							Local\Diesel
11/1/2	No	Drill or air seeder single disk openers 7-10 in spac.	Wheat, winter silage S.E.	14.0					Local\Diesel
2/15/3	No	Fert applic. surface broadcast							Local\Diesel
3/15/3	No	Sprayer, insecticide post emergence							Local\Diesel
5/1/3	No	Harvest, small grain haylage 5 in ht				280	15	830	Local\Diesel

Change the lower “Harvest, silage” row date to 8/16/2, then change the “Harvest, silage” operation to “Begin weed growth”.

RUSLE2 Version 2.5.2.11 (Aug 18 2014)

File Database Edit View Options Tools Window Help

Auto update

Management: default*

Graphic
Rel. row grade, % 100

Add to this management to make new one: Open

View/edit rotation builder used to make this management: open

Irrigation system: no irrigation

Long-term natural rough., mm 6.0
Normally used as a rotation? Yes
Duration, yr 1

Fuel for all operations: Local\Diesel
Base equiv. diesel use, gal/ac 8.53
Base energy use , BTU/ac 1200000
Base fuel cost, US$/ac 29.86

(MAN_STIR) 55

(AVG_ANNUAL_MAN_ 55

MAN_OP_VEG_CROP_YEAR_EN ..._START_SET_CHOICE_USER

Crop Year STIR Values

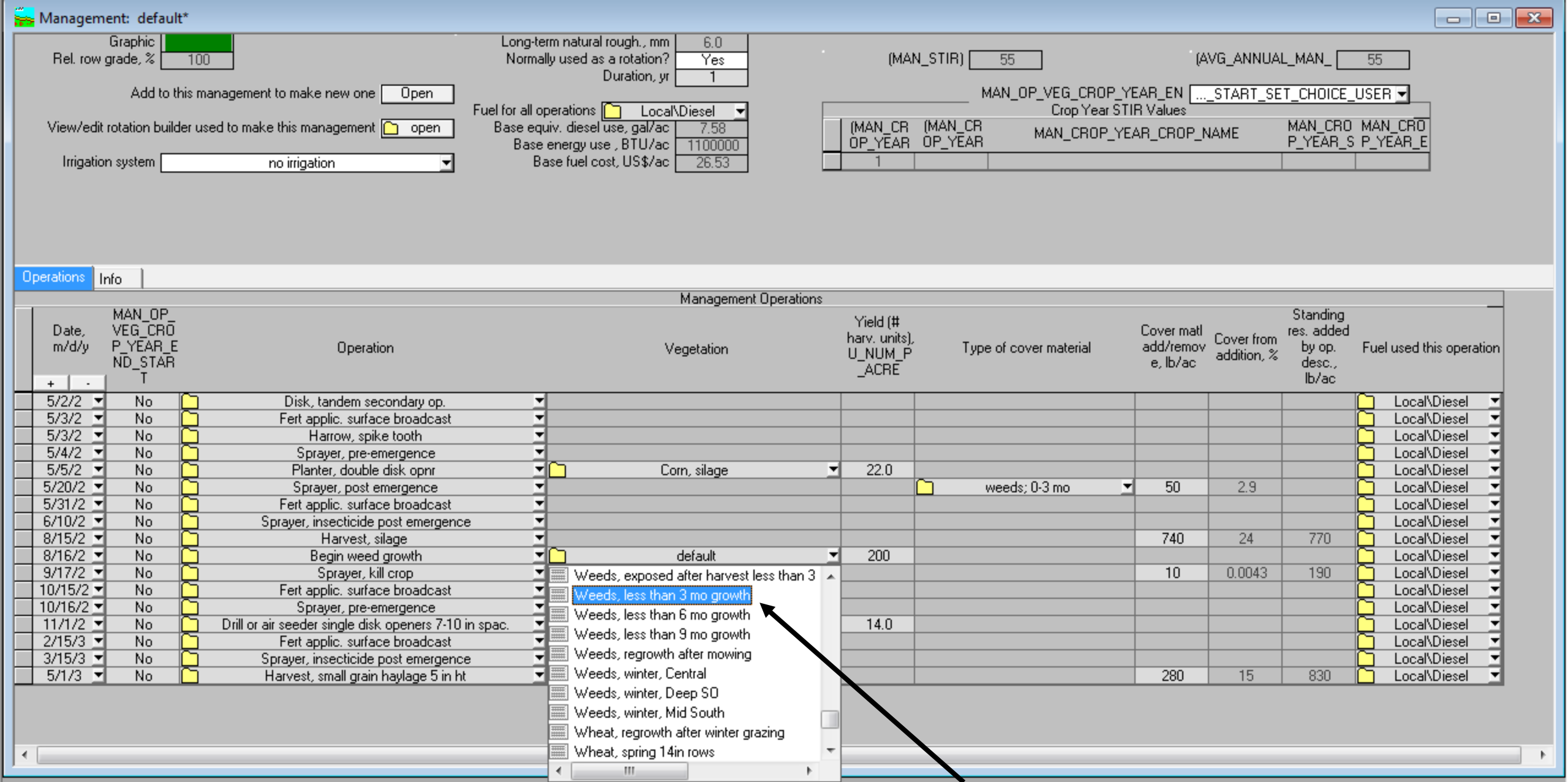
	(MAN_CROP_YEAR	(MAN_CROP_YEAR	MAN_CROP_YEAR_CROP_NAME	MAN_CROP_YEAR_S	MAN_CROP_YEAR_E
	1				

Operations | Info

Management Operations

Date, m/d/y	MAN_OP_VEG_CROP_YEAR_END_START	Operation	Vegetation	Yield (# harv. units), U_NUM_P_ACRE	Type of cover material	Cover matl add/remove, lb/ac	Cover from addition, %	Standing res. added by op. desc., lb/ac	Fuel used this operation
5/2/2	No	Disk, tandem secondary op.							Local\Diesel
5/3/2	No	Fert applic. surface broadcast							Local\Diesel
5/3/2	No	Harrow, spike tooth							Local\Diesel
5/4/2	No	Sprayer, pre-emergence							Local\Diesel
5/5/2	No	Planter, double disk opnr	Corn, silage	22.0					Local\Diesel
5/20/2	No	Sprayer, post emergence			weeds; 0-3 mo	50	2.9		Local\Diesel
5/31/2	No	Fert applic. surface broadcast							Local\Diesel
6/10/2	No	Sprayer, insecticide post emergence							Local\Diesel
8/15/2	No	Harvest, silage				740	24	770	Local\Diesel
8/16/2	No	Harvest, silage							Local\Diesel
9/17/2	No	Bedder, hipper, hiller 12 in high							Local\Diesel
10/15/2	No	Bedder, hipper, hiller 15 in high							Local\Diesel
10/16/2	No	Bedder, hipper, hiller 18 in high							Local\Diesel
11/1/2	No	Begin growth	Wheat, winter silage S.E.	14.0					Local\Diesel
2/15/3	No	Begin new growth							Local\Diesel
3/15/3	No	Begin new style veg regrowth							Local\Diesel
5/1/3	No	Begin weed growth				280	15	830	Local\Diesel
		Bulldozer, clearing/cutting							

Double click on “Begin weed growth”.



Change the "default" vegetation file to "Weeds, less than 3 mo growth".

Management: default*

Graphic
Rel. row grade, % 100

Add to this management to make new one: Open

View/edit rotation builder used to make this management: open

Irrigation system: no irrigation

Long-term natural rough., mm 6.0
Normally used as a rotation? Yes
Duration, yr 1

Fuel for all operations: Local\Diesel
Base equiv. diesel use, gal/ac 7.58
Base energy use , BTU/ac 1100000
Base fuel cost, US$/ac 26.53

(MAN_STIR) 55

(AVG_ANNUAL_MAN_ 55

MAN_OP_VEG_CROP_YEAR_EN ..._START_SET_CHOICE_USER

Crop Year STIR Values

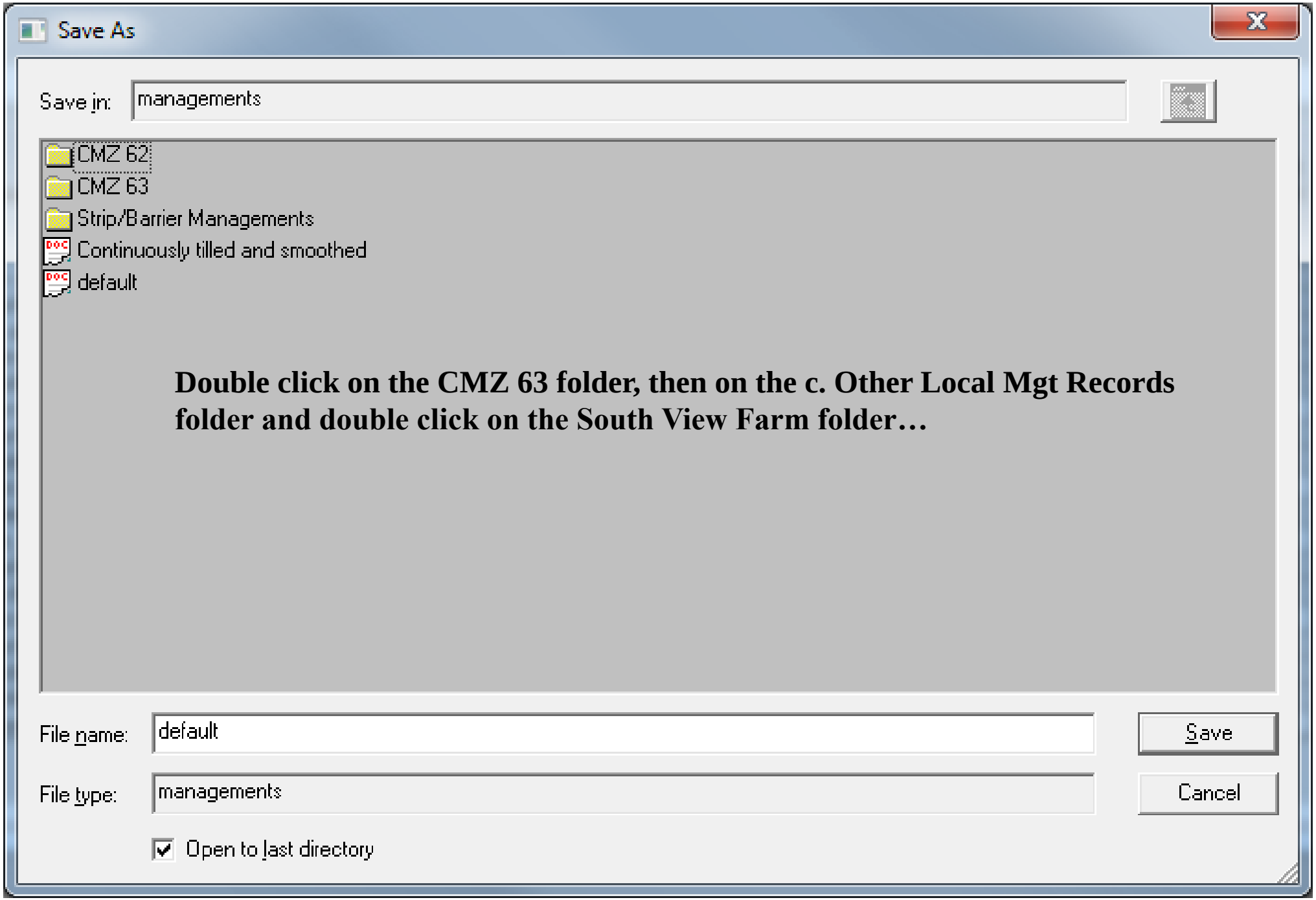
	(MAN_CROP_YEAR	(MAN_CROP_YEAR	MAN_CROP_YEAR_CROP_NAME	MAN_CROP_YEAR_S	MAN_CROP_YEAR_E
	1				

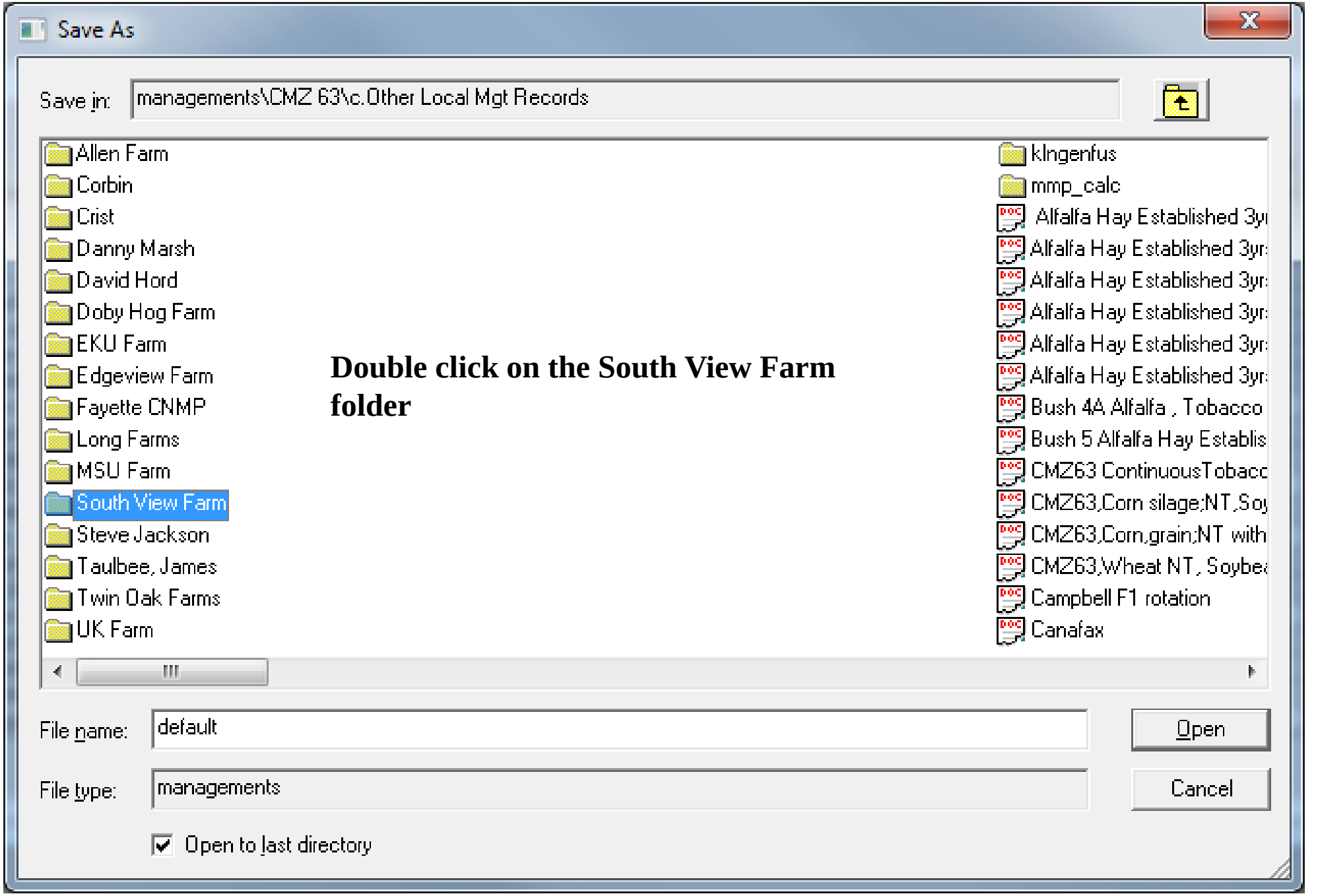
Operations | Info

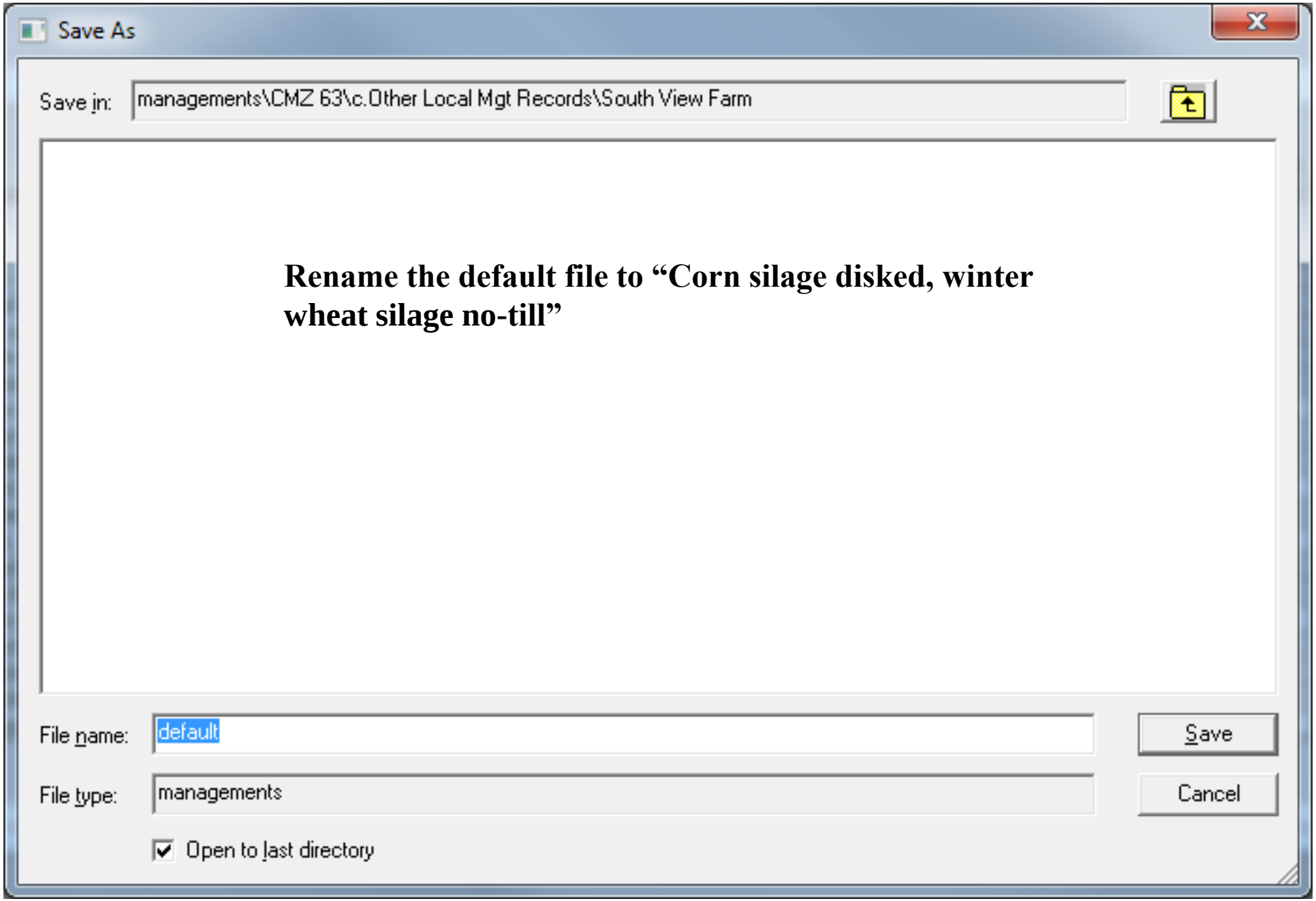
Management Operations

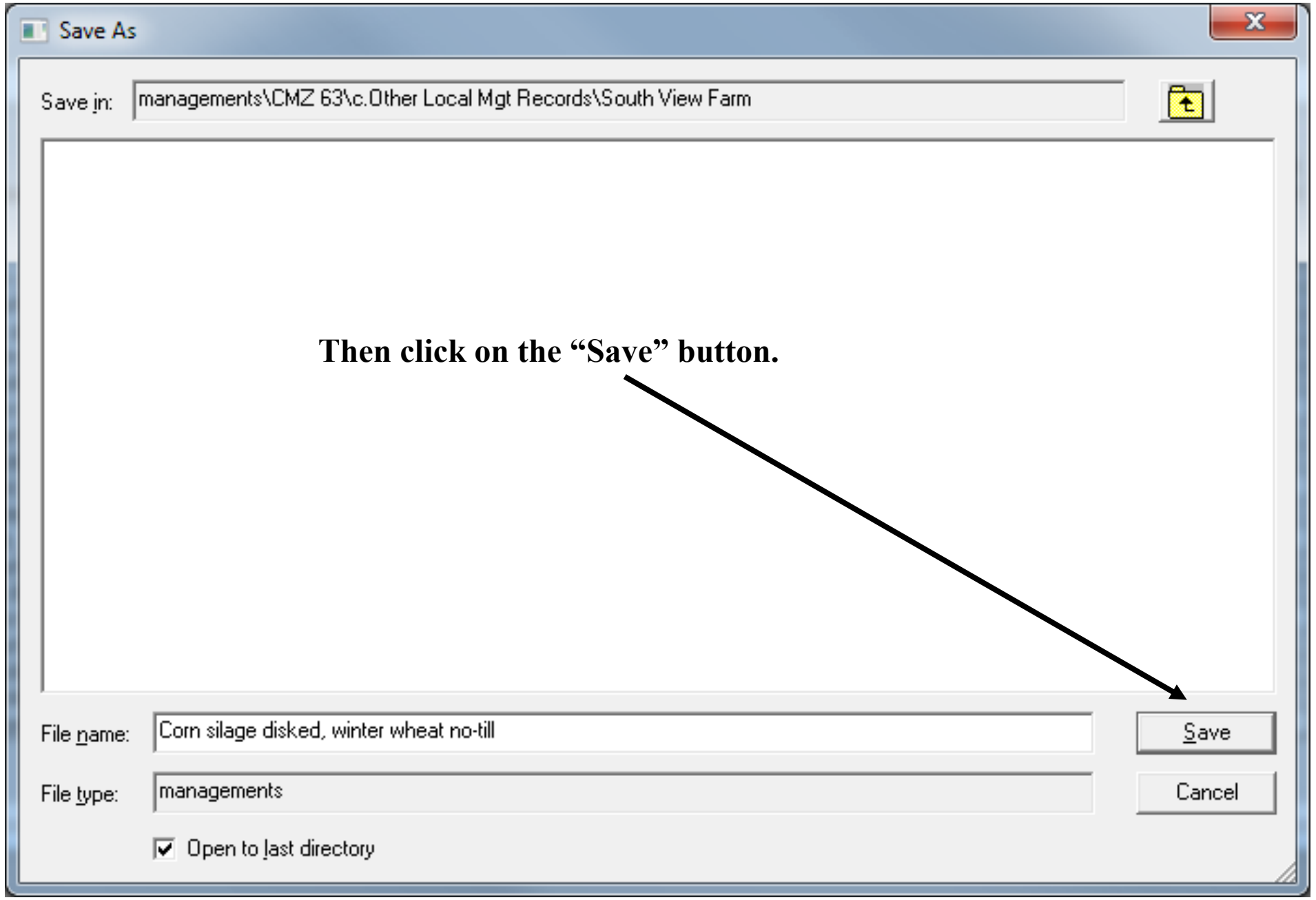
Date, m/d/y	MAN_OP_VEG_CROP_YEAR_END_START	Operation	Vegetation	Yield (# harv. units), U_NUM_P_ACRE	Type of cover material	Cover matl add/remove, lb/ac	Cover from addition, %	Standing res. added by op. desc., lb/ac	Fuel used this operation
5/2/2	No	Disk, tandem secondary op.							Local\Diesel
5/3/2	No	Fert applic. surface broadcast							Local\Diesel
5/3/2	No	Harrow, spike tooth							Local\Diesel
5/4/2	No	Sprayer, pre-emergence							Local\Diesel
5/5/2	No	Planter, double disk opnr	Corn, silage	22.0					Local\Diesel
5/20/2	No	Sprayer, post emergence			weeds; 0-3 mo	50	2.9		Local\Diesel
5/31/2	No	Fert applic. surface broadcast							Local\Diesel
6/10/2	No	Sprayer, insecticide post emergence							Local\Diesel
8/15/2	No	Harvest, silage				740	24	770	Local\Diesel
8/16/2	No	Begin weed growth	Weeds, less than 3 mo growth	500					Local\Diesel
9/17/2	No	Sprayer, kill crop				1.8	0.11	35	Local\Diesel
10/15/2	No	Fert applic. surface broadcast							Local\Diesel
10/16/2	No	Sprayer, pre-emergence							Local\Diesel
11/1/2	No	Drill or air seeder single disk openers 7-10 in spac.	Wheat, winter silage S.E.	14.0					Local\Diesel
2/15/3	No	Fert applic. surface broadcast							Local\Diesel
3/15/3	No	Sprayer, insecticide post emergence							Local\Diesel
5/1/3	No	Harvest, small grain haylage 5 in ht				280	15	830	Local\Diesel

The crop rotation is now complete. Click on “File” on the top left and select “Save As…”


Save As
Save in:
managements
CMZ 62
CMZ 63
Strip/Barrier Managements
Continuously tilled and smoothed
default
Double click on the CMZ 63 folder, then on the c. Other Local Mgt Records folder and double click on the South View Farm folder…
File name:
default
Save
File type:
managements
Cancel
Open to last directory


Save As
Save in:
managements\CMZ 63\c.Other Local Mgt Records
Allen Farm
Corbin
Crist
Danny Marsh
David Hord
Doby Hog Farm
EKU Farm
Edgeview Farm
Fayette CNMP
Long Farms
MSU Farm
South View Farm
Steve Jackson
Taulbee, James
Twin Oak Farms
UK Farm
klngenfus
mmp_calc
Alfalfa Hay Established 3yr
Alfalfa Hay Established 3yr
Alfalfa Hay Established 3yr
Alfalfa Hay Established 3yr
Alfalfa Hay Established 3yr
Alfalfa Hay Established 3yr
Bush 4A Alfalfa , Tobacco
Bush 5 Alfalfa Hay Establis
CMZ63 ContinuousTobacc
CMZ63,Corn silage;NT,Soy
CMZ63,Corn,grain;NT with
CMZ63,Wheat NT, Soybea
Campbell F1 rotation
Canafax
Double click on the South View Farm folder
File name:
default
Open
File type:
managements
Cancel
Open to last directory


Save As
Save in:
managements\CMZ 63\c.Other Local Mgt Records\South View Farm
Rename the default file to “Corn silage disked, winter wheat silage no-till”
File name:
default
Save
File type:
managements
Cancel
Open to last directory


Save As
Save in:
managements\CMZ 63\c.Other Local Mgt Records\South View Farm
Then click on the "Save" button.
File name:
Corn silage disked, winter wheat no-till
Save
File type:
managements
Cancel
Open to last directory

Management: CMZ 63\c.Other Local Mgt Records\South View Farm\Corn silage disked, winter wheat no-till

Graphic
Rel. row grade, %: 100

Add to this management to make new one: Open

View/edit rotation builder used to make this management: open

Irrigation system: no irrigation

Long-term natural rough., mm: 6.0
Normally used as a rotation?: Yes
Duration, yr: 1

Fuel for all operations: Local\Diesel
Base equiv. diesel use, gal/ac: 7.58
Base energy use , BTU/ac: 1100000
Base fuel cost, US$/ac: 26.53

(MAN_STIR): 55

(AVG_ANNUAL_MAN_: 55

MAN_OP_VEG_CROP_YEAR_EN: ..._START_SET_CHOICE_USER

Crop Year STIR Values

	(MAN_CROP_YEAR	(MAN_CROP_YEAR	MAN_CROP_YEAR_CROP_NAME	MAN_CROP_YEAR_S	MAN_CROP_YEAR_E
	1				

Notice the file location indicated on the heading…

Operations | Info

Management Operations

Date, m/d/y	MAN_OP_VEG_CROP_YEAR_END_START	Operation	Vegetation	Yield (# harv. units), U_NUM_P_ACRE	Type of cover material	Cover matl add/remove, lb/ac	Cover from addition, %	Standing res. added by op. desc., lb/ac	Fuel used this operation
5/2/2	No	Disk, tandem secondary op.							Local\Diesel
5/3/2	No	Fert applic. surface broadcast							Local\Diesel
5/3/2	No	Harrow, spike tooth							Local\Diesel
5/4/2	No	Sprayer, pre-emergence							Local\Diesel
5/5/2	No	Planter, double disk opnr	Corn, silage	22.0					Local\Diesel
5/20/2	No	Sprayer, post emergence			weeds; 0-3 mo	50	2.9		Local\Diesel
5/31/2	No	Fert applic. surface broadcast							Local\Diesel
6/10/2	No	Sprayer, insecticide post emergence							Local\Diesel
8/15/2	No	Harvest, silage				740	24	770	Local\Diesel
8/16/2	No	Begin weed growth	Weeds, less than 3 mo growth	500					Local\Diesel
9/17/2	No	Sprayer, kill crop				1.8	0.11	35	Local\Diesel
10/15/2	No	Fert applic. surface broadcast							Local\Diesel
10/16/2	No	Sprayer, pre-emergence							Local\Diesel
11/1/2	No	Drill or air seeder single disk openers 7-10 in spac.	Wheat, winter silage S.E.	14.0					Local\Diesel
2/15/3	No	Fert applic. surface broadcast							Local\Diesel
3/15/3	No	Sprayer, insecticide post emergence							Local\Diesel
5/1/3	No	Harvest, small grain haylage 5 in ht				280	15	830	Local\Diesel

With the crop rotation complete, we are ready to conduct some soil erosion predictions using the RUSLE2 Worksheet.
Continue with the RUSLE2 Worksheet User's Manual to finish your RUSLE2 learning curve.

For more info please contact Tibor Horvath at:

859-224-7413 or Tibor.Horvath@ky.usda.gov